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OF

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TRANSLATED FROM THE ORIGINAL

BY

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tion could devise, for I then thought that outward appearances might have, in some degree, acted upon my veneration for this eminent leader, so I purchased an eye-glass similar to his, and when I first made my appearance, with it, in Court, it certainly caused not a little sensation amongst my legal brethren, but more particularly with my learned friend that was entitled to the silk gown, though alas! I very soon discovered that my gold double eye-glass did not throw his inspiring mantle over me, with this disadvantage too that I have been obliged since to wear spectacles as a necessity according to my own judgment.

Acting under the advice of Baunscheidt I hope and think that I shall recover a great portion of that which I lost by a foolish freak of fancy; I assure my friends that before then, I had good sight, both for short and long range.

Now, the foregoing simple anectode I relate, merely, to warn all persons against the use of spectacles, and to endeavour, when they think their sight is becoming defective on the short range, to regulate the focus by the distance between the eye and the paper on which they are writing.

Mr. Baunscheidt has written his work for the benefit of the million, and I have translated it, with the same spirit, into the plain Saxon-English language.

There are some Latin phrases introduced, merely for the purpose of identifying the diseases, with more fixed certainty.

In my joint translation of Mr. Baunscheidt's larger work I stated that I had been cured of Bronchitis, by the means therein described, and I feel so much benefit by the relief from that frightful disease, under which I had suffered so long, that I hope it may not be considered out of place to refer to this disease again. We frequently read, in the orbituaries of the English Newspapers, that many persons, of all ages, fall victims to this scourge to mankind, and, therefore, I conceive it to be merely a duty to my fellow countrymen to call their attention to this simple, expeditious, and effectual method of remedying the evil, by means of Baunscheidt's system.

How many men have I known afflicted with bronchitis, and also with those unsightly and inconvenient excrescences, known by the name of wens! Should this preface meet the eye of any one suffering under either of these diseases, he can, on referring to Baunscheidt's larger work (to be had at Dulau & Co., 37, Soho-square, London) relieve himself.

I may observe, that although we have had, during this winter, in Prussia, all kinds of weather, trying to the constitution of man, yet this horrible disease (bronchitis) has not paid me its periodical visit, for which I shall, through the remainder of my life, feel indebted to Mr. Baunscheidt as the humble instrument, under The Highest Power, of giving me such efficient relief.

As I have suffered so much from this dreadful complaint, having been attacked by it periodically at the commencement of winter, during the last forty years, I can state, with confidence, that I am a living instance of the efficacy of Baunscheidt's system and I earnestly recommend it.

I have lately made an anatomical examination of the whole formation of the human throat, assisted by a medical student, and it appears to me, that this part of the framework of man is so delicately formed, that every one should guard it with the greatest care and continual attention. If the ***ligamenta vocalia*** (which are the cartilages or ligaments that modulate and control, in a great degree, the voice) become diseased, what is more likely to give immediate relief than drawing away the obtrusive matter which, while it remains there, is a prevention to the cure! Medical men, generally, endeavour to remove this evil, by means of gargles, warm plasters, etc.; but the return of spring and summer has, for a series of years, been of more benefit to me, and I fancy to other persons also, than these attempted remedies.

I recollect there was a renowned physician at a celebrated watering-place, in the middle of England, who had a great desire to have me under his care, because he had heard, that I had spoken somewhat disrespectfully of the medical profession; I disappointed him, for I was never ill enough to require his services. I knew what I had to expect; viz. to go to bed, swallow all kinds of nauseous drafts, pills, elixirs, and possets, made of barley water, whey, and white wine; to undergo severe purgations and perspirations and be reduced to a skeleton, by keeping to my bed for two or three months—however I disappointed the gentleman, and was well pleased with the idea that I had escaped so disagreeable a visitation. The healing powers of nature are truly wonderful! and, as Mr. Baunscheidt so correctly observes, she only wants ***assistance,*** such as the Lebenswecker and oil ***can*** give, and ***care*** and ***attention*** to the ***directions*** (given by him so ***simply,*** yet so ***lucidly***) whilst the patient is under the operation of his healing system, which, if strictly acted upon, will abolish all that disgusting charlatanism of pills, elixirs, salves, embrocations etc. the advertisements of which disgrace the columns of so many English newspapers.

In conclusion, I express the earnest hope that this treatise of Baunscheidt will prove a great and lasting blessing to tens of thousands (as his larger work has already done, having passed through seven editions), of persons suffering from any disease of the eye, and I have no doubt that the very clever and noble-minded author will receive their thanks, which will be as sincere as those of

THF TRANSLATOR.

PREFACE.

To suffering mankind, and to those who feel themselves called upon and are desirous to favour me with their assistance, I submit this little work, and trust it will be received with the same warmth of affection and consideration as was extended to its eldest sister. It promises, with sincerity and decision, to be, in its circle, not less useful and healing than the former one, and with which it is closely connected. I declare that this, my youngest child of my reflection and experience, has been as carefully nursed and matured as my eldest one, and it has just as good an inclination towards practical utility, and I am perfectly convinced that it will cause my fellow men (a few envious and perversely conceited ones excepted) nothing but pleasure and satisfaction. It will visit alike the cottage of the poor as well as the palace of the rich, and how often will it meet a poor child of man who, joyless and full of pain, sits in the dark cell excluded from the joyous light of day and who can no longer behold the glorious light of the sun, and the influence which it sheds upon the splendid creations of The Great Almighty Power of the universe, and thus is this poor child left to mourn over the loss of the greatest earthly blessing! Medicine has left the unhappy one in deep affliction and disappointment, and only, in his dreams, a good fairy appears to him who lays its rosy hands upon his eyes and removes the veil, but alas! when he awakes from his dream the same darkness surrounds him; then he feels more acutely the misery to which he is doomed, and behold! on some auspicious day my youngest child advances and pours hope into his cheerless heart, and leads him, with a careful and steady hand, along a way upon which he again finds the source of light. The veil falls! the mists disperse! the night has passed away! and the earth, the sun, and the benevolent face of man smile upon him once more! This time it is no deception, the fairy has really touched him. He can, in company with others, fully and richly enjoy this beautiful world.

To draw on my imagination for such glorious scenes as these is my highest and sweetest reward, and I may, with the greater confidence, do this, as I have had the supreme satisfaction of witnessing, in numerous instances, the complete restoration of sight by my healing method.

Many readers will, very reasonably, inquire why I have not, long since, laid before the public such a little useful book as this. I have had, during many years, the intention so to do, and I have given notice of such intention in my larger publication, but the real fact is, as often as I began I felt a kind of misgiving in my mind (and I am not ashamed to confess it) that I had not sufficiently studied so important a subject, and that I ought to possess more experience before I launched on the world instructions and hints which were to prove of such vital consequences to mankind in general, for it is my highest consideration and honest pride never to press on the public attention anything which has not for its basis the most rigid truth, long experience, and well tried results, and I do sincerely think that this little book will prove to the world that I have not over-estimated its merits. In the practical part there is no disease mentioned which I have not had, in most cases, to attend to myself, and if success, which rests on sound theory, be the result of my practice, I can with every degree of confidence introduce my little work to all those who are in any way afflicted with ocular disease.

All superabundant and useless matter I have studiously avoided. My Book contains only so much as is absolutely necessary to the explanation of the part which the Lebenswecker plays in the art of healing the eye and is intended to form a directing thread, grounded on my more advanced experience as to the treatment of the diseases of the eye.

With confidence I trust that this work will assist my invention (which is uniformly successful through most parts of the world) to a more general spreading of the science, and to a more universal acknowledgment of the same, and to limit the abuse which the physicians still commit on this branch of the healing art. It will send the knife, caustic stone, and belladonna, these three pitiless tyrants, to the sphere of action to which they belong, and that most assuredly is not to the successful healing of the eye. How the two first named articles could be used by the despairing oculists I can, in some degree, imagine, as in some cases their use may be excused, but of what use belladonna could be in such cases I am at a total loss to conceive. How could reasonable men conclude that they could assist in curing the disease of the eye by increasing the size of the pupil of it. Perhaps they may draw such a conclusion because they think that strychnin works beneficially on the spine when it brings out tetanus in cases of poison; can one help finding such conclusions incomprehensible? If any oculist in the world will show me only *one* patient healed by belladonna I will willingly recall my condemning decision, but it is very improbable that any one can. As my experience, rightly and at a proper time applied, convinces me that the cataract operation is superfluous, and I am quite certain that the dangerous and destructive poison, known

INTRODUCTION.

As in nature we perceive a steady progress, gradual in perfection, in the whole concatenation of animal life, from the lowest to the highest degree, in which nowhere is to be seen a defect or a want of connexion, so each single link we may compare to the step of a ladder, and this ladder is much higher than our ideas can lead us to comprehend. Certainly there are Beings who are much more perfect than those we consider the most perfect; but our understandings cannot draw them within the focus of our intellectual faculties.

According to our judgment man stands upon the highest pinnacle of this earth, and without hesitation we may consider the eye upon the lofliest point of his organic arrangement. Man can only be fully and entirely estimated by purely minded spirits that withdraw themselves from our view, so the eye ranks next to the spirit which is reflected from the eye. — The Bible therefore sublimely informs us that "The eye is the light of the Body" and it is invariably the case that when any one wishes to scrutinize the thoughts and intentions of his fellow man he looks steadfastly and keenly at his eyes; it is a well known fact that a wicked conscience causes the eye to avert from a searching look. How clearly and distinctly can we see through the eye into the soul; with what certainty can we discover by observing the eye, love, faith, benevolence, innocence, intelligence, and decision and detect cunning, indecision, deceit, and crime. Those who exercise this power can seldom or never be deceived, although perhaps they cannot express their sentiments and thoughts in language sufficiently clear. How uninteresting, nay we might almost say how repulsive, is the most beautiful countenance with an expressionless eye! and how attractive and charming do the plainest features become when ligthed up by beautiful, expressive and intelligent eyes. With his look man strikes terror into animals, and wild herds are tamed by the stern look of the bold wild man. With his look the general animates and directs his warriors. No man can be a great commander unless he has a masterly look; no one could have the piercing look of the great Frederick of Prussia without possessing his spirit, for it is even the mind that comes out through the eye.

The eye is the immediate connecting member between the soul and the outward world. The highest knowledge and the greatest education that we may be desirous to arrive at, we can reach only through the medium of the eye; without this faculty nature would remain, with its laws and teaching, closed to us; without this power the beautiful, the great, the exalted, would not raise, educate, and improve us; and the certainty of the existence and government of our Everlasting Creator how do we obtain it quicker and more distinctly than through the eye? Let us only once ôbserve the wonderful construction of the smallest mineral, or let us look into the depths of astronomy and we are seized with a sweet comprehensive view, a forestate of eternity; we learn through these means, more respecting the wonderful power of the Almighty than all the explanations of man can teach us. The light of the sun is likewise the source of the purest joy and enjoyment, and the absence of it makes life an appearance without a reality, a shadow without a substance, in short, a miserable existence. Reflect, my dear reader, still further, and consider how many treasures of great and incalculable value the earth contains, and ask yourself this simple question: "Would I exchange the light of the eye for them?" You will not long consider the question; you will reply promptly and resolutely, "No!" There is no equivalent for the light of the eye. Then preserve it, with all care, in its greatest possible perfection. Spare that organ in health that it may not become weakened or diseased. If disease has seized it, do not allow rough tools, knives, fire, exciting salves, and poisonous substances, to be applied to so noble, so tender an organ, in order that an evil, so easily remedied, may not become greater. How you should act I will point out to you in the following pages, after I have said so much as is necessary about the construction and functions of the visual organs. Instruct yourself and let it be deeply engraven on your memory, and you will bless the Almighty power and thank me, as his humble agent, that a way is found by which the dangers that threaten, on so many sides the noblest of the senses, can be prevented, and which way has not hitherto been discovered.

* * *

I.

A DISSERTATION ON THE CONSTRUCTION OF THE VISUAL ORGAN.

ANATOMY.

The eye, without its outward appendages, is called or termed the apple of the eye which lies in a cavity of the face: the bony hole projecting into the skull is generally known by the name of "the socket of the eye" which is surrounded in its interior, extending to the back of the eye, with a fatty substance. The socket is funnel shaped, that is to say, in front broad, terminating in a point formed by the optic nerve *(Foramen opticum)*. The bony wall of the socket is not completely closed; there are two apertures in the posterior portion, one communicating with the upper part of the brain, and the other with a side channel of the face *(Fossa pterigo palatina)* at one end of the upper eyelid, adjoining the nose, there is a hole *(Foramen supraorbitalis)* sometimes it is only a little opening forming a communication with the vessels, this can easily be ascertained by any one. Now we come to the ***canalis naso lachrymalis***, or tear canal, which forms an oblong at the anterior part of the inner lining of the eye-socket. It has upon its surface a channel; there is a similar one in the bones lying close by the hollow space which contains the tear-bag, out of which arises the tear channel, and that continues in a downward direction to the nose, and this is called the nasal tear canal, and forms a passage for the tears through the nose.

The edges of the eyelids are fringed with stiff hairs. The skin is drawn or extends from the outward surface of the eyelid to the inner, where it becomes much more delicate and tender in its texture, and forms the binding skin, called the conjunctiva, which continues from the edge of the orbita to the bulb of the eye, covering its outward surface; here is that part of the general structure of the eye where inflammation so often takes its seat.

The unctious matter, which we often find hardened into incrustated little substances at the corner of the eye, next to the nose, especially in the morning when rising from bed, is separated from the oleagenous glands, on the edge of the eyelid, and these glands are intended to oil the eyelid, and thus prevent the overflowing of the tears.

The eyebrows, in the form of a convex arch, are composed of hair which shades the eye and prevents the perspiration falling on it.

Muscles.—There are seven muscles in the socket of the eye, one of which serves to raise the upper eyelid, but the other six are destined for the various movements of the apple of the eye.

The one, known by the name of the *Levator palpebræ superioris,* rises near the pupil or near the sheath of the optic nerve, it runs towards the front and joins the upper edge of the cartilage of the eyelid; the other six, which may be considered the proper muscles of the eye, are divided into four straight muscles (one over and one under and one inner and one outer) and two curved muscles (one upper and one lower). The four straight muscles spring from the edge of the pupil, and join, above and below, right and left, the hard skin of the apple of the eye, a little distance from the cornea, the upper curved muscle has the same origin as these, it runs in the upper and inner corner of the eye towards the front, passes along the edge of the same through a tube formed of cartilage, and then diverges below and outside to the apple of the eye, to which it is attached behind the upper straight muscle; the lower curved muscle at last springs from the inner end of the lower edge of the socket of the eye, and in the same manner is joined to the apple of the eye behind the lower straight muscle.

These six muscles give the eye the power of motion in all directions necessary for the purposes of sight, and a diseased contraction of any one of these muscles causes an oblique vision, generally termed squinting.*)

The tear glands functions are to separate the salt fluid which we call tears. They lie in the upper outward corner of the orbita and have several outlets. The tear liquid is spread over the outward surface of the eyeball by the closing of the eyelid, and this closing cleanses and washes the eye and sends any foreign minute particles, that may be there, to the inner corner of the eye where they are removed though they are also removed or absorbed through the tear aperture into the tear channel and thence carried away. It is only when the tears flow copiously that they inundate the checks. By this arrangement the outer surface of the eyeball is always kept moist, and the attrite cells are continually cleansed; these conditions are most necessary in order that the transparency of the cornea may be preserved.

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*) I have often been asked if squinting could be cured by the Lebenswecker. Whoever knows that the contraction or expansion of the muscle beyond its naturally constructed limits can be operated upon only by direct application, he will at once perceive that these muscles of the eye can be approached by the knife of the operator, only with great difficulty and danger, but that a man should submit himself to the lancet of a surgeon would not be under our advice, for rather than allow himself to be made the subject of so dangerous an experiment, we should at once decide, that it would be much better for him to suffer this little, so called, deformity, which is not so great as he imagines, than to try a painful and very doubtful remedy.

After this short epitome of our ideas on the assisting and protecting powers surrounding the visual organs, we now arrive at the consideration of the eyeball.

The eyeball is constructed strictly in accordance with the optical laws. Physical science teaches us this, but with such beautiful and high perfection that the hand of man, assisted by the most elaborately constructed optical instruments, cannot attain or indeed approach. The eye is elliptical and upon the front surface of it is placed a section of a little ball which consists of skins placed one upon another (similar to an union) and this formation contains a transparent substance.

The outerskin of the eyeball is the hard skin of the eye *(sclerotica)* with horn-skin *(cornea)*.

Each is before and behind the thickest.

At the posterior surface they are pierced by the pupil nerve, the sheath of which weaves itself in, and on the anterior surface goes into the hour-glass shaped cornea, with a change in its texture, with which the transparency of the same is bound.

The second skin is formed of the membrane *(chorioidea)*, and the rainbow skin *(Iris)*. This membrane is joined firmly to the inner surface of the hard skin, and the posterior part is also pierced by the optic nerve; it consists of a fibrous web of numerous blood vessels and has besides, particularly on its inner surface, a dark colour. The rainbow skin is spread out behind the cornea, the latter being arched and the former flat; the space between the two is called the chamber of the eye; the rainbow skin, in the middle, is pierced by the round pupil; the muscle fibres, which, partly in the form of a circle and partly in rays, surround the pupil, and produce, by their contraction or expansion, the narrowing or widening of the pupil. That there are blue, black, gray, and brown eyes etc. depends upon the many different rainbow skins in the eyes of different persons.

The choroid membrane is followed by a tender net like membrane, called the retina. This does not extend to the front, but a little beyond the middle of the eye ball. It is the expansion of the optic nerve, therefore it is the optic nerve itself, and through it arises the sight. Upon the bottom we remark a yellow spot (*macula lutea*) which may be called the central point of the whole organ of sight as only on this place is the clear and sharp sight composed (1—1$^1/_2$ great).

In the interior of the ball of the eye, which is enclosed by the already described skins, are situated the glass like body and the crystalline lens.

This glasslike body fills the hollow of the retina; it consists of a transparent membrane enclosed by fine skins which are filled with a clear liquid; the same has in front a hollow in which the crystalline lens is imbedded.

The crystalline lens lies, like a grain of corn in its husk, in a transparent capsule, which is united behind with the integument of the glasslike body.

The front one, which is free and turned to the rainbowlike skin, is much less curved than the one behind.

The lens consists of globules containing a substance similar to the white of an eye and possesses, of all eye liquids, the strongest power to break the rays of light.

As, has already been mentioned, the space between the horny skin and the rainbowlike skin is the anterior chamber, the posterior, which is much less (but according to recent investigation this is doubted) has its place between the rainbowlike skin and the crystalline lens. They are both filled with a thin transparent fluid, similar to that which the lens contains.

It only remains for us now to cast a look at the vessels and nerves of the visual organ.

As to the first it is only necessary to mention the arteries which conduct the blood, made useful for nourishment by the action of the lungs imbibing the atmospheric air, out of the left cavity of the heart into the web, as the blood vessels, together with the arteries, recede in order to allow the blood, after it has fulfilled its object, to flow into the right cavity of the heart, from whence again it flows into the lungs and recommences its course.

On each side of the neck we can feel a large artery pulsation which alone very nearly supplies the whole head with the necessary blood; the chief artery *(chorotis)* is in the upper part of the neck, divided into the outer and inner head arteries, called charotis externa and interna.

The outer head artery has little to do with the nourishment of the visual organ, but one of its branches, known as the inner jaw artery, communicates, by means of a little branch of arteries, with the lower division of the eye socket; the lower eye socket artery *(arteria infraorbitalis)* the branch of which joins the lower straight and curved eye muscles: as the chorotis externa surrounds the eye we may here mention that this last named artery, in fine branches, unite with those eye arteries which proceed, to a certain extent, from the eye socket.

The inner head artery enters into the skull providing, in a great degree, the necessary blood to the brain, and representing the eye artery *(arteria opthalmica)* which, with the optic nerve, enters the eye socket through the *Foramen opticum;* here the branches run into all parts of the eye and also on the assisting organs; but the crystalline lens (the glasslike body) and the cornea have no vessels. After the assignment of the branch on the eye, the eye artery lies on the upper edge of the socket and falls into the brain artery and the back artery of the nose, but from their branches come several out of the orbita after having performed their appointed organization in order, as we have before stated, to join the other arteries of the face.

The nerves, which supply the visual organ, come from the brain and indeed the second, third, fourth and sixth pair of brain nerves are especially appointed for that purpose, and so are the fifth pair to a certain extent.

The second pair of the optic nerves, (*nervus opticus*) which compose the sight, partly interweave their fibres one with another, and then pass through the pupil into the socket of the eye, and also through the unctious substance to the ball of the eye; their terminations have been before pointed out. If we would look at the base of the brain we should see the very strong visual nerves passing out from the so called visual hills, forming a cross before the same, and then taking a direction towards both eyes. One might compare tihs to a coachman, high upon the driving box, holding in his hands the reins with which he guides both horses, and indeed the eyes may be considered the horses with which the mind drives out far into the interminable distance and impelled by the brain, the next organ to the soul, by which we mean the visual nerves, which, by way of illustration, we will call the reins, guide and govern the horses and so every action is kept in order and unison. The upper nerves of the eye proceed from the brain passing through the upper aperture of the eye socket into the orbita.

The third pair provide the upper, inner, lower, and straight, as well as the curved eye muscle, and the elevator of the upper eyelid, because these constitute the moving organs of the eye they have received the name of the eye moving nerves *(Nervi oculomotori).*

The fourth pair *(Nervi trochleari)* ascend to the curved muscle.

The sixth pair, the outward eye muscle nerves (*Nervi abducens*) are connected with the straight muscle.

Lastly, the fifth pair; these send a branch into the socket of the eye and are divided into many branches in order to communicate with the tear glands, the eyelids, the binding skin etc. The branches come out partly from the sockets and enter the nose, the brain, and the temple etc. and like the arteries unite themselves with other nerves.

II.

ON THE SENSE OF SEEING.

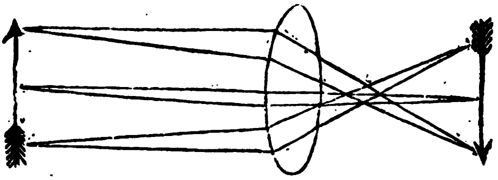
PHYSIOLOGY.

After having briefly described, in the last chapter, the optical machinery, we will, in a brief space, show in this, how, by means of the apparatus of the sight, the perception of the objects in space, through the mind, comes to pass. We cannot admit, in this portion of our work, the disquisitions of the professors and teachers of optics, but must, on this important subject, refer to the various publications on physics.

To see, it is necessary that a picture or resemblance of the object to be seen should arise or be reflected on that net-like membrane, the retina, and this takes place in the following manner.

If we hold a double convex lens at a certain distance from a white wall opposite a window we shall see upon the wall, but inverted, or turned upside down, a true picture of the object presented for representation; there appears a cone consisting of very many rays of light (in figure 1 there are, for the sake of simplyfying the subject, only 3 points and from each two rays of light are drawn) the rays diverging from one point strike off at an obtuse angle in passing through the lens on the right side and the left, according to the representation in figure 1, converging and meeting at a certain point behind the lens, and then diverging.

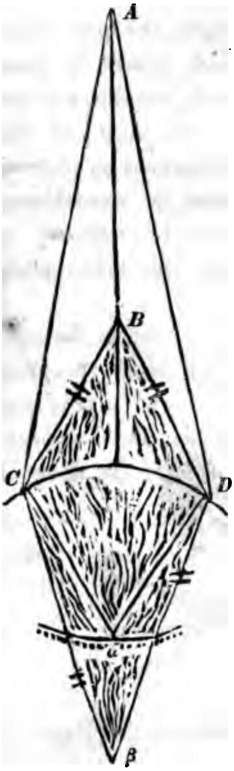
Fig. 1.



The rays which fall on the arched cornea of the eye incline in the same manner, and thus inclination is increased by the crystalline lens and the glasslike body; here arises upon the retina a small well defined inverted picture of the object from which the rays proceed.

The point at which the inclined rays unite and cross each other is called the burning point.

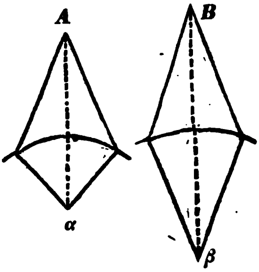
Fig. 2.



The further the end of the ray is distant from the object or surface which causes it to diverge, the nearer lies the point at which the rays intersect each other behind that object or surface, and so vice versa. (Fig. 2.)

The more a surface, which alters the straight lines of the ray, is arched, the greater is (at least among objects of equal size) its power, and therefore nearer behind it lies the burning point, and vice versa (figure 3).

Fig. 3.

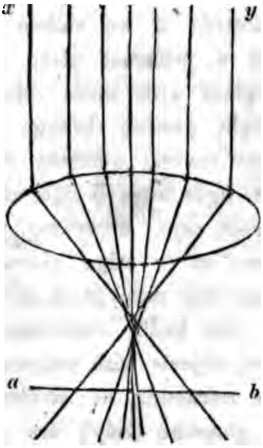


We will now adapt these two laws to the eye, and we shall have the following result. In figure 2, *α* represents the retina. The point *A* we shall distinctly see because its picture falls exactly upon the retina, that is to say, the rays proceeding from the former are united in the latter. But now let us bring the point *A* to the point *B* we shall no longer see it distinctly, because its rays unite themselves in *β* and therefore can reflect no distinct image on the retina.

Consider, on the other hand, the proportion of the approximation to point *A*, also the arch of the outer crystalline lens' surface, and then we shall perceive that the image at this point remains clear and distinct, for as we have before remarked, the smaller the arch of the intercepting surface and the greater the distance the end of the ray the image must fall on the same place as it would, in proportion, fall by the greater arch and the less distance. This quality to arch itself, less or more, the crystalline lens possesses, and, indeed, it can, besides this, change its position towards the glassy body and the cornea by advancing and receding, whereby the interruption of the rays of light are modified. We call this the power of accomodation of the eye; to this we owe the ability of seeing an object plainly at various distances.

The power of accommodation varies in different persons, and is enclosed in certain boundaries. The distance at which most men are able to distinguish large objects distinctly is called the middle long sight. With the short sighted the cornea is strongly arched and with the long sighted more flatly arched, therefore it is evident why the former can see a near object quite clearly and distinctly and the latter at a greater distance, and why the former must use concave spectacles and the latter convex, to remedy any defect in the vision.

Fig. 4.



The crystalline lens of the eye is more strongly or roundly arched at the edges than in the middle, therefore the side rays of light, *x y*, in figure 4, are more inclined or acute in their angles than the middle ones, uniting themselves sooner, and must prevent the retina, *a b* from having so clear an image as it otherwise would have, if these rays did not intercept the more distant ones, and thus diminish the distinctness or power of vision; the rainbow-like coating, with its opacity, sèrves to ward off these side rays from the eye, and acts, in some degrée, like a screne; it allows only the middle rays to pierce through the pupil into the interior of the eye. The more contracted the pupil is, the more distinct becomes the image, but, to a strong sight, it is necessary that a sufficient quantity of light should be admitted into the eye; therefore the pupil is provided with the power of expanding and contracting, according to the strength of light which the eye meets. If we come out of a light room into a dark one, at first we see nothing, but, by degrees, the pupil expands, and a larger number of the scanty rays of light pass into the eye, and we are, in a short space of time, able to discern the objects in the room; in common parlance we say, we become accustomed to darkness; the contrary is the effect when we enter a lighted room.

The rays of light are not all of equal quality; they make different impressions on our retina; that is to say, they appear to us in different colours; the different coloured rays have not the same powers of inclination, some unite themselves through the lens earlier, some later; in the white light, that is the sunlight, all are united; if we collect a number of rays of this light through a prismoid piece of glass (that is, a piece of polished glass with three sides) and place it so that the rays of light, passing through it, may fall on a wall, there will appear several different colours, namely, orange, yellow, green, light blue, indigo, and violet: through the prism, the different rays, according to their various interceptions, are thrown on to other places; they are divided. In the common lens this takes place more or less, therefore one sees, through the badly constructed glasses of microscopes and telescopes, objects with coloured edges; the three means of the eye refracting or dividing the rays of light (cornea, lens, and glasslike body) are so arranged that the different rays, in their passage through the same, remain united and suffer no dissipation of colour; they are achromatical, in immitation of this arrangement the lens of the optical instruments are constructed, and this forms a good model, though open to improvement.

It is necessary to the sight that the image presented to the retina should be capable of being received; let us consider this, and go a little into detail. Through the whole universe there is a fine exterior material that is spread out, which fills all spaces that otherwise would be empty, and penetrates the most minute parts of the body, viz., the ether, when this ether is at rest we have darkness, but if it be in motion (by the touch of a lighted body) our retina feels the shock which the moving ether produces; the retina is thereby excited, and this excitement we receive as sight.

The motion of ether assumes a wavy form, as in all vibrating bodies; in a ray of white light the waves are of different colours*). When these strike, at the same time, upon the retina, it receives the impression of white, if they be divided it will receive the impression of different colours. The rays which have the greatest length of wave, we receive as red. The violet rays have the shortest length of wave: one can therefore easily understand, that if the rays of different lengths of wave (different colouring) fall at the same time upon the retina, the impression, that is to say, the colour must be a mixed one, for instance, yellow and blue make green. Investigation into the laws of nature has reached to such a high point in our time, that we have been able to compute the oscillations in our ether; the rapidity of motion is so immense, that red rays make 450billions of movements in a second, and the violet 727billions in the same time.

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*) The reader is referred to the works on metaphysics, to instruct him as to the motion of the waves.

As colour of the light is received by the retina, so are the different heights of the waves, as gradations of the light.

We have already mentioned (page 29) that the retina is not at all times capable of receiving impressions, but it is generally the case that it can be acted upon succesfully at the point of the yellow spot. This yellow spot has, in the middle of it, another rarified spot, which has the greatest power of receiving impressions. In order to be able to view an object very minutely, the eyeball, by means of its muscles, is so placed that one point after the other of the same lies exactly opposite this place.

To all this must be added, as the condition of perfect sight, the following, viz.:—

1. That the picture presented to the retina is not too small; there is for each body, according to its size, a boundary of distance, after which it vanishes from our sight; this boundary depends partly upon the strength of light; it is therefore to be understood, that as the formation of the eye is very different this boundary cannot be the same with all men; various pursuits and exercises do much to create a difference in men's powers of vision; we know that the Bedouin in the African desert can see a horseman at a distance from whence the European sees nothing, or at most a speck in the distant horizon.

2. We must also direct our attention to the object we wish to see; every one knows that a man may look with open eyes in broad daylight without seeing anything distinctly, therefore a certain degree of exertion is necessary. If the retina has become tired it requires some rest, that it may recover itself, and be able to fulfil its functions with fresh vigour.

Besides the oscillations of the ether, there are other influences, viz. the perceptions of light. There is a law respecting the action of the nerves, according to which each nerve has its ordained function, and this it can only perform, let it be excited in whatever way it will; whatever influence may be exerted on the ear nerve, or palate nerve, the former will merely have a perception of sound, and the latter of taste; the excitement of the optical nerve, by touch or pressure upon the eye, or by the galvanic stream, calls forth the perception of light continually, and therefore representations are the source of sight-perceptions and images, for instance, dreams.

The impressions which the waves of light make on the retina do not vanish immediately, but continue to work, if only for a short time, and thus arise the so-called facsimiles, and in this manner, it can be accounted for, why we see the electric fluid or the flash of lightning which precedes thunder, this being only a spark light substance, or a zigzag line, and why we see a fiery circle when we describe a circumference with any red-hot body.

It only remains for us to say something respecting the activity of the mind, by the act of sight.

The visual nerves carry the sensation made upon the retina to the brain, and this calls forth the activity of the mind. By these means the single points of the image are united to a whole, and then is given to this image its precise place in the room, and its distinct size, proportion etc. In order to attain this knowledge we have, in the first place, to collect experiences in the spaces of the outer world, especially through the sense of feeling. A child has not this experience, nor has a grown up person who was born blind, and who may have suddenly obtained sight, and therefore we shall, at once, perceive that he would not be in a condition to measure the distance and sight of objects; it is therefore by experience that we place the image upon the retina, see the body itself, and put it in the outer world, and from which body the image is produced; the experience and judgment having been acquired, we then see the object in its real place, although the image on the retina, as we have stated before, is inverted or upside down.

The seeing with both eyes is necessary, if we would not desire to turn the head in all directions, in order that we may command a perfect view of the object we wish to behold. A body has three dimensions; length, breadth and thickness; in order that the retina may embrace these dimensions it would be necessary, had we only one eye, to turn about very frequently, but as we use both eyes, one eye acts in one portion of a surface and the other another space or surface; the mind moulds the impression, received through the two eyes, into an entierty. From this natural combination of visual and mental powers springs the principle of the stereoscope; thr ough the two glasses of that instrument, we see two photographic drawings of the same subject, the one as it opens to the right eye, and the other as it appears to the left eye, and thus is received the impression of one body by the concluding action of the brain.

This is, in short, the most comprehensive conclusion that the present state of science has been able to arrive at, but still there are many questions, in this department of science, open to dispute, and there are many points upon which the learned themselves are not agreed, so that, perhaps, the whole system of this science may, at some future period, be entirely changed. Now this is a subject for the scientific, and we will feel very much obliged if they will offer something better, and less doubtful, than that which we now possess.

III.

HOW THE EYE CAN BE PRESERVED IN A HEALTHY STATE, AND KEPT FREE FROM DISEASE.

PROPHYLAXIS.

It is easier to prevent disease than to cure it. This, generally well acknowledged axiom, is particulary applicable to the diseases of the eyes. Hundreds of eye diseases arise from treatment and nursing of the organs of sight. Innumerable misfortunes, partly or wholly, to the sight are owing to ignorance. Information on this subject is, therefore, very necessary, and should be communicated by the master at school, by the minister to his congregation, but more especially by the physicians, so far as their circle of practice may extend, then many a misfortune and much injury would be prevented. In a work which treats of the diseases of the eye, such information should on no account be wanting, and therefore I will endeavour, in this chapter, to give instruction, as clearly as possible, how the most noble of all the senses can be maintained in all vigorous health, and strength.

In order that I may not intimidate my readers, I will not lay before them all the insignificant rules which would extend my observations further than the limits of this work will permit. Would to God! that the following, the most important, would be conscientiously observed everywhere!

First I shall speak of what is, at the present time, the most deplorable evil of the eye, and that is, shortsightedness. I certainly think that it would not be too much to state, that nearly the one half of mankind, in this our civilized Europe, suffer through this failing. I might, perhaps, except the class occupied in husbandry; in the towns we need only to place ourselves in the streets to convince us of the sorrowful fact; the half of the young people, who pass, have either a pair of spectacles on their noses, or an eye glass attached to their button hole, which they occasionally apply to their eye and oh foolishness! how many, by doing this, imagine they add to the gentility of their appearance. In the estimation of the right thinking, such crutches of the eyes have nothing more beautiful than those wooden ones which the lame must, from unfortunate necessity, make use of.

My readers must not suppose that I here speak against an evil which cannot be remedied, for I now boldly assert that shortsightedness is, in most cases, ignorantly, or otherwise, their own fault. If a baby has the playthings always held close to its eyes, if the children at school have their heads too close to the book which they are reading, if young people, when writing or reading, have the paper too near their eyes, or if a pair of spectacles, or an opera-glass, be used for sport or fashion, can we wonder that shortsightedness is the consequence. If we accustom ourselves to look at things very closely, the body, which refracts the rays of light in the eyes, takes such a position that the objects can be seen only at a short distance: this effect, in pursuance of habit, becomes a perpetual one, and seeing at a distance from the object of sight (the normal sight) becomes an impossibility.

We therefore subjoin the following rules:

Use your utmost and continual endeavours, by all means within your control, to avoid the causes given above, and similar ones that tend, in the least degree, to produce shortsightedness.

But if you already be shortsighted, still, in youth, it can be very much remedied; in order to attain this end let spectacles be used as seldom as possible; look at distant objects for a lengthened period and often. In working, endeavour, as much as possible, to keep your object of work at a distance, and always increase your efforts so to do.

By observing these rules much will be effected. It is a most important point never to use too strong spectacles if you would wish not to destroy the hope that in after years, by the flattening of the cornea, nature itself will remove the evil.

With many men, who have a weak or otherwise defective sight, this evil begins at the very earliest period of their lives. If a strong light, sudden change of temperature, draft, dust, smoke, etc., be injurious to the eye of the grown up person how much more must this be the case with the tender infant, lately introduced into the world. Be careful not to let the full stream of sun or candlelight fall upon the eyes of so tender a being.

Injury to the visual nerve, Amaurosis, would be a frequent and sorrowful consequence of the same; for this reason it is necessary to darken the room of a lady during her confinement, but not less necessary is it to prevent smoke, dust, impure air, or draft, entering the room, as also to keep the temperature at a moderate degree of warmth, and moreover, careful attention should be paid by nurses that the infant be not carried about with the face turned upwards, without protection from the rays of light. I have often seen, with regret, a baby turned towards a lighted candle suddenly, and then quickly withdrawn from it, and occasionally the light danced before its eyes, and all this done with an intention of exciting, or appeasing the infant, or gratifying a stupid propensity of the nurse. When the eyes of children are sound and healthy, neither the parents nor those who are appointed to take care of infants should be guilty of this folly.

The grown up should avoid the sudden changes from strong light to darkness, and vice versa, and it is particularly to be remarked, that the light which comes from the side or underneath into the eye, is far more trying to it than that which only comes from above. It is very injurious to the eyesight to perform any work by imperfect, or weak, or too strong light. — From the foregoing observations we draw the following rules:

One should not permit, on waking in the morning, the full day, or sunlight, to fall on the eyes; one should avoid looking at the sun, or for any lengthened time at the fire, at the moon, or at a whitewashed wall, upon which the suns rays are glancing.

One should protect the eyes, particularly of children, by wearing a cap or hat, furnished with a broad peak or rim.

We should endeavour, as much as possible, to avoid the reflecting rays of the sun, in passing over snow, or over roads, or sandy plains, when the sunlight is strong.

Reading, writing etc. by twilight ought to be avoided particularly when there is an unsteady flame in the candle. He who must work by candle-light should provide himself with a lamp that has a screen, but the place upon which the greatest volume of light falls should not have the paper written upon, or the book that he may be reading, in that strong light.

Never read in bed; the light is always too great, or falls upon the book from the side, and thus the eyes have not a normal position; they must, by this practice, be turned too much on one side or the other, and this action causes too great a strain on the muscles of the eyes, and optical weakness is the consequence.

In schoolrooms and other places of industry the lights should be neither too strong nor too weak; the light ought to come from one side (left) and fall from above.

We could give our readers many more rules for their guidance on this important subject, but they will be able, when they have read with care and attention the above, to adopt others without further assistance, but in those instructions, which we have already given, there is advice sufficient to protect the eyes in all ordinary cases. A further source of much of the eye-suffering is the continuing long in an atmosphere impregnated with dust, smoke, or other inflammatory particles. Many workmen, particularly in manufactories, cannot, unfortunately, avoid these destructive atmospheres, but if it be impossible for such persons to withdraw themselves, entirely, from such noxious influences on the eyes, they may, considerably, mollify the effects, by allowing their eyes, at short intervals, rest, and frequently (but not when they are in a state of heat and perspiration) washing them with cold filtered rain water. A soft linen rag should be used, but the eye should not be rubbed; the application should be gently administered.

As the visual organ is so nearly connected with the brain, all that works upon the eye must have a corresponding influence on the former. A certain influence is exerted through any affection of the nervous system; that all joyful or exciting effects work upon the eye is universally acknowledged, and indeed is quite apparant: and it will be seen that this is the case when we observe the eye sparkling with joy and happy glances radiating therefrom, but every one can prove this by standing opposite to a looking glass when his mind is under the influence of various passions and feelings, such as hope, courage, and pleasure etc. But on the other side of the question all which works on the nervous system, such as fits of anger, sorrow, and misery, and also physic, in all its various and obnoxions forms, which generally contains the most deadly poison, overexcites and weakens the visual organ. Lastly, dissoluteness of all kinds, particularly that of promiscuous sexual intercourse, weakens the eyesight, in a very great degree, and that is pretty generally known and acknowledged by reflecting men. What is the result of these observations? Rules which I need not here write down, as they have been preached by theological teachers, and tutors, by orators, and authors, by Heaven, and earth, (but unfortunately all the good advice, given through generations by wise and well intentioned men, has had little beneficial effect). All these before mentioned evils work injuriously on the brain, and, through it, on the organs of sight; blows and other shocks, on the head and ears, work injuriously on the brain, and affect the eyes;

the doutche bath, such a favorite specific by the water doctors, has also the same tendency.

As it is with the other organs, so must it be with the eye, after it has, through exhaustion, in consequence of severe exertion, been overstrained; it must therefore have its strength restored by rest; when it has been the whole day in activity so it ought not to be exerted during a great portion of the night, as if the sight be so badly economized it will surely produce baneful effects on the vision. Let the necessary night's rest be taken, if possible, and, with refreshed sight and body, the eyes will certainly be able to perform more work than would have been in their power to accomplish in the hours stolen from sleep; at the same time we ought to observe, that those persons who are obliged to use their eyes very much in reading, writing, sewing, working at embroidery, and pursuits of a similar description, should allow themselves, very often during the day, a little time for rest, if it be only for a few minutes. People who gain their livelihood by such kind of work must attend to this part of my advice, as from the continued retention and preservation of the visual organs, in full vigour, depends the subsistence of their bodily frame.

Of all the causes of the diseases of the eye which arise most frequently, and is of the most importance, cold is the chief, general as well as partial with nearly every illness which reigns in the body; the eye catches it through sympathy, but by nothing so quickly and easily as by cold. A great number of painful diseases of the eye follow in its train, and that man, who has subjected himself to its influence, may consider himself very fortunate if he should escape with a simple inflammation. — In my work of Baunscheidtismus,* I warn every one, in a most emphatic manner, against cold, because this is the source of many, indeed of nearly all diseases; I must again earnestly reiterate this caution; by a constant and vigilant attention thorough drafts of air can and ought to be avoided — should they fall upon the eye, an inflammation is almost certain to be the consequence in a very short time. The same will be the case, in a higher degree, if the eyes be washed with cold water, immediately on rising from bed, as they will then be still heated; at least half an hour should elapse before the application of cold water. Everybody knows how injurious it is to the health if one remain, without great activity and motion of the whole body and its members, with wet clothes on or with wet feet. These causes always act injuriously on the eyes, if other diseases do not attack the other organic arrangement of the body; but should it be the case, that one is exposed to such injurious influences (or similar ones which it is not here necessary to mention) let the Lebenswecker be applied, plentifully, to the whole of the back, before any bad symptoms are felt, and the reaction, which in most cases will be called forth, will check the progress of the threatening disease on the body, and thus prevent the evil. Lastly I state, from my most sincere conviction, that many diseases of the eye might be prevented, if every one, even he who feels himself quite healthy, would submit himself to a course of applications of the Lebenswecker, in spring and autumn.

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* The seventh edition is now published, and may be had at Wittmann's in Bonn.

This would simply consist in having a good operation performed on the back, which after ten days should be repeated, and under some circumstances again in ten days; many injurious substances, particularly incipient rheumatism and gout, would be expelled, the nerves would he strung up to a vigorous activity, the action of the epidermis would be increased, the circulation of the blood excited to greater energy, the whole organization being cleansed, and consequently strengthened, would be in a better condition to resist the baneful influences to which we are all exposed. This operation would be of great beneficial effect to the organs of sight, which depend so much upon the general health of the body. Enough! *We* have fulfilled *our* duty, and it now remains for every man to fulfil *his* duty towards *himself*, for *his own* advantage, comfort, and prosperity in this world.

IV.

DISEASES OF THE EYE AND THEIR CURE.

PATHOLOGY AND THERAPEUTICS.

A. General Part.

It might be thought that medicine during the 3000 years over which it has had its career since the time of Hyppocrates until the present era, would have had sufficient time for its developement, and that knowledge, on diseases of the eye and their cure, would have arrived at its culminating point of perfection. With other internal disorders the physicians can plead the excuse that man is not transparent, and blame cannot rest on them if they occasionally form an erroneous judgment on a disordered function of the body, and in consequence administer many remedies, or that the seat of a disease lies in a portion of the system which his preconceptions cannot reach. They are always prepared with an excuse or an apology for their medicines not having produced those favourable results which had led the patient to, so anxiously, look for, and expect.

With diseases of the eye, no subterfuge of this kind will or can stand the test of searching enquiry, a good and skilful doctor surely cannot be deceived respecting the diseases of the eye, for they are quite visible to his sight, and he can, without any difficulty or doubt, apply the remedy. If we are asked what things are generally used by the physicians to cure eye diseases, we shall say, the knife, caustic, and cruel poisons! As to the numerous other means of cure the desciples of the healing art appear not at all desirous to place any confidence in, but on the contrary, they invariably wish to apply their so called remedies, on the seat of the disease, instead of, as is their wonted custom when attacking diseases in the interior of the body, going round about, yes they would adopt this course even if their application did not prove quite null; they would not apply such dreadful weapons to such a tender noble organ, if they were not obliged to produce some effect, even should that effect rank upon the scale of healing with "null" and must be marked with a "minus;" that this is the truth I have, by my extended experience, been long convinced of. Numberless diseases of the eye I have treated myself, many others I have had described in letters addressed to me. It appears to me that as many diseases of the eye have been caused by the knife, caustic, and poison as have arisen from natural influences; at this no one will feel astonished, when he reflects on, and understands the delicate and complicated formation of the visual organ. I, on the contrary, am astonished at the powerfully creative healing ability of Mother Nature, which, notwithsanding all the ill-usage she receives, now and then effects her own cure.

I do not mean to assert, that there are no cases in which the knife or caustic would be necessary. There are a few diseases where the eye or the patient must fall a victim to, and may be compared to the cesarean operation, as to the probabilities of a successful issue; but, in most cases, where operations of this kind are risked, the instruments used in the attempt to cure have robbed the unfortunate patient of his sight. There are diseases which, in general, would not have fully developed themselves, if the right means had been earlier applied. To the remedies which I offer to mankind for the diseases of the eye, I include, in those diseases, cancers in an advanced state, syphilitica, the growing together and swelling of the eye lids, gatherings and ulcers in the eye, the closing of the pupil etc.

Some other evils, to which may be added the wounding of the eye and its attending so called helping apparatus by exterior violence; sharp instruments etc. belong altogether to the province of surgery; with those we have nothing to do.

In all other cases (the names of which assume a form and sound, in medical science, so extraordinary, that we think it must have been imported from the Tower of Babel) the Lebenswecker, used properly, is the only means of curing; from its very nature it shows this; truth and it have been further proved by experience. I shall not here enter upon a long discussion of the principles upon which my healing experience rests; that is already noted in my large book, but I will confine myself to some notices, how out of these principles, its healing method must be successful when brought to bear on diseases of the eye.

Most eye diseases are not local, as has already been hinted at above, but originate in the condition of the general organism, although some modern physicians repudiate this idea for their own convenience. The truth of this assertion is easily arrived at. The scrofula, cancer, scurvy, incipient gout, congealing of the blood, or want of blood, rheumatic or nervous affections are by far the most general causes of disease in the eye; every one will be convinced of this by a little reflection on the subject. At the same time the result may be reached *à priori*. It is well known and acknowledged that a disease of the body attacks the weakest and most susceptible part, it here generally first asserts its destructive power, and its injurious products are here exhibited. None will deny that the eyes belong to the tenderest and least able organs to resist disease, and therefore are the more exposed to attack by any complaint lurking in the body. We conclude our observations on this part of our subject with this remark: The eyes willingly form themselves into fountains.

For such evils, of what help will a local treatment, to which the physicians confine themselves, prove? None whatever! or very trifling and temporary, for, in general, the evil will appear in a more virulent form, if it be for a time suppressed or rather partially concealed; of such patching we do not approve, but remain true to our principle; a cure only in appearance is worse than none at all. With our Lebenswecker we seize the root of the evil, and if that can be completely uprooted it cannot spring up afresh. The radical cure is accomplished; that the Lebenswecker can effect this, we need not, as if for the first time, assert. If you do not know this truism yourself, dear reader, ask your neighbour and he will give you all necessary information with enthusiasm.

With the general treatment we nevertheless connect the local, where it appears necessary or useful, and in the few cases where the evil is really only local, we confine ourselves to it. How in these cases the Lebenswecker is the best of all means is also easy to prove; the artificial, innocent, inflammation, which the Lebenswecker calls forth in the neighbourhood of the affected organ of sight, is the best way of taking away the inflammatory matter, lodging there. It forms, too, the strongest, safest, least dangerous, system, in cases that are of long standing. Many physicians seek and travel over the beaten path to reach the evil, by means of Viesikatore, Moxa, leeches, etc., but these means are partly ineffectual, and partly outweighed, by the disadvantage followed by any small success gained. We must, therefore, reject them entirely. The Lebenswecker does not work in an antephilologistic manner (such as is done by the application of leeches which is the cause of the loss of the life's blood) but by bringing the skin into a greater state of activity. and consequently all the functions of the body in the neighbourhood of the diseased organs, and thereby removing the stagnation or morbid action of the same.

The part is not deprived of its nourishing fluid, the blood, but on the contrary, such a lively and active circulation is promoted, that it produces a greater supply through the vessels. The drawing away of blood can never be beneficial, but frequently most detrimental. The greater the flow of the blood is, on the contrary, proved to be the best means of healing the human body in most cases. But when this is not the case, that is, when the circulation is languid the Baunscheidtist can excite it to activity, and equipoise it, by an application of the instrument on the whole back and the calves of the legs. If the disease of the eye be caused by a too strong flow of blood to the head, then we must not apply the instrument to this part. We do not justify, in any case, lancet, bleeding, dry cupping, or leech bleeding for the following reasons.

By drawing the blood off, as a matter of course, there is so much less blood in the body.

If there be, in the whole body, less blood, then there must, as a natural consequence, be less blood in the part affected, and this, as will be admitted by all physicians, is the point aimed at.

Now if this particular part has less blood, the evil will, in most cases, cease, at least for a shorter or longer period, but we do not admit that it will be removed.

Without going into a long disquisition upon the con sequence arising by the drawing away of blood, and which has been fully explained in our larger work, we shall make the few observations following:

The blood is supplied afresh, or it is not. If it be not replenished, then the body has not its normal quantity of nourishing fluid, and there is an injury committed, which cannot be repaired.

If the blood should be replenished, the same evil will soon come again (we now allude particularly to any disease which may affect the brain) and so the remedy applied has been worse than useless.

These results are so clear, that it is only to be wondered at, that more attention to them has not been called forth, than we have generally found to be the case.

The Baunscheidtist has a real and direct remedy. He knows that when the flow of blood is too strong at one portion of the human system, it is too weak at another; if there be an undue flow to the head, there is a deficient flow to the feet (and they become cold). The Lebenswecker must then be applied to the calves of the legs, or, if necessary, to the soles of the feet, and, by these means, the circulation of the blood will become more active, and more equally distributed through the vessels, of which the patient will soon be conscious, by the suddenly encreased warmth to his feet.

The above rules are principles of the highest importance in my healing invention, which, in the treatment of the eye, must be most assiduously observed, and acted upon.

But it may be asked, if the eye disease lies in the nerves how can the Lebenswecker act upon them?

We know that every time the nerves are agitated, or disordered, the cause is the want of nourishment.

In the Lebenswecker we have, in the first place, the power of producing a better preparation of blood.

Secondly, we are able, as we have before explained, to supply a greater quantity of blood, which is a nourisher of the nerves.

Thirdly, we are enabled, by means of the mechanical application, to work upon the nerves, and should we not be able to meet with those, directly, which are affected, we can do so, through other nerves in connexion with them, or through the large nerve or central organ, from which they branch or spring.

In many diseases, particularly in the gray cataract, or inspissation or thickening of the crystalline fluid of the eye, it is necessary that the matter, exuding or lying in the part affected, should be drawn out or sucked up.

The laymen may, in order to comprehend fully what is meant by "sucked up," take into their consideration the nature or disease of a gathering, or ulcer, or hard substance, under the epidermis, which, in most cases, is removed by a distribution. The deposited substance, very minutely separated, is carried through the arteries again into the blood, and from thence through the common means of outlet entirely out of the body. The professional man will thus see how the matter, arising from the diseased eye, is carried away, but for a layman to understand it, thoroughly, we should be obliged to epitomise a whole chapter on the subject, from physiological science, and that would extend beyond the limits of the present work.

The system established for curing eye diseases by the operation of the Lebenswecker is fully explained, and, we think, in a much more clear and concise form than any that we have heretofore seen or read. There is this one fact which our system can safely congratulate itself upon, and that is: by its working, the eye is never reduced to a weaker state than we, at the commencement of our operations, find it in, and when cured it attains its former strength and perfection.

The cure is simple and natural. These two qualities should never be separated, for the operations of nature are always simple. They reach, with the smallest means, the highest beneficial results, thereby giving us an idea of the way in which we should support her in her efforts. The physician should mark nature's operations with the most anxious attention, for his duty is simply to lighten and aid nature's endeavours, which great object he can accomplish merely by immitation, and consequently he should not throw any difficulties in her way, but we are sorry that we should be compelled by a sense of duty to observe, that many physicians, with their complicated experience, adopt a hundred different systems to attack life's activity in the organization. The foregoing observations we put forth to the world as an axiom, which we can safely do. Our long and great experience prompts us to make this further remark, that what the Lebenswecker cannot accomplish in this respect, the disease is incurable.

Before we pass over to the particular forms of disease, we here give some general rules, which, in the treatment of diseases of the eye, it would be desirable to follow.

For cooling and cleansing the diseased eye no fluid should be used except pure rain water, cleared from all salt, earth, or other particles; therefore filtered rain water or, still better, distilled rain water, is to be recommended. Should this however be too cold, pour a few drops of hot milk into it until it has obtained the proper degree of temperature. A soft linen rag, not a sponge, should be used; patting and not rubbing the weak eye should be observed, in order to avoid all irritation. The more secreted matter is drawn out the greater weight must be attached to this observation. The matter thus drawn away must not be allowed to touch the eye again, therefore it is advisable to change the rag very often. It must also be remarked that this matter is very infectious, and, consequently, great care must be taken that none of it reaches the other healthy eye, or that of another person.

The diseased eye should never be bound up; the pressure, in consequence of its being bound up, is most injurious to the eye, and in many cases increases the maladies. It is better to apply a shade of gray or blue paper or a loosely hanging linen rag, and should the inflammation be considerable the patient ought to sit in a room, with a subdued light, as much as possible.

Many diseases of the eye, particularly those of a chronic character, are not suitable for a self-cure; these maladies and their symptoms are mentioned in those parts of this work which treat of individual cases. Such patients should apply to a good Baunscheidtist, or to the inventor himself, describing fully the disease and its symptoms, but, in the mean time, he should apply the Lebenswecker to his back, in the manner pointed out by the various rules set forth in this work, until he has received fuller information; this cannot be injurious, as in most cases it forms the principal part of the cure.

B. Special Part.

We now proceed to the consideration of special diseases of the eye, and the application of the Lebenswecker. It lies in the very current of our thoughts not to be governed in the arrangement of them as the trained school of medicine is by ancient custom, and its written laws. We shall claim, for ourselves, a wider field of operation and reflection, though we beg leave to assure our readers, that we have studied the anatomy of the eye, both theoretically and practically, through a long series of years.

In our healing experience we have come to the conclusion, that it is a matter of very little importance to us, in what portion of the eye the disease is seated, or from what cause it arrises, we know the remedy, and that is enough. We have proved this so often, that we are content with the *quod erat demonstrandum.* We know full well that medical men endeavour to cure diseases of the eye of different kinds by one and the same means and which means, we know from experience, are worse than failures, and now passing from this remark we shall make a few observations on the common inflammation of the eye, viz.:

1. OPTHALMIA.

An inflammation in the smallest blood vessels *(capillaren).* In the normal state of these vessels the right quantity and quality of fluid passes through them, for the sustentation and nourishment of the web, or texture. When these vessels are overcharged, a quantity of mixed fluid must enter and pass through them, and this we call exuded. This exuded matter enters through the smallest parts of the web and flows into the apertures it may meet in its course. It then forms itself into webs, fibres, and cells or into matter which last may be of that description which may form abscesses, gatherings, &c.; symptoms of inflammation are redness, swelling, heat pain, &c. The healing is effected by the blood being reduced to a finer fluidity and consequently its power of absorption renovated. In what way the Lebenswecker effects this we have before described.

Physicians have, at the present time, a name for a particular kind of inflammation for each portion of the eye. The binding skin is red, often entering into the yellow namely, the conjunctiva, cornea, iris, etc., although they themselves confess that the inflammation is confined to one part alone. We do not here speak of the inflammation of the eye in general, because the mode of treatment depends upon the causes; we therefore divide the inflammation according to the causes in the following divisions:

a. O. Catarrhalis.

Symptoms. Itching, burning pain, accompanied by a sensation of sand being in the eye, the conjunctiva assuming a red or yellowish colour; the blood vessels showing themselves very distinctly; the edges of the eye, assuming a whitish red appearance, and somewhat swollen. In tho morning the eyelids are fastened to each other; in the evening the eye is at its weakest point; it is at first dry, but as disease abates a rheumy fluid exudes.

Causes. Cold. A cold caught in the head is generally accompanied by inflammation of the eye.

Continuance. It may last fourteen days. By neglect it soon becomes chronic, and changes from a fluid into a substance. By the proper use of the Lebenswecker this never happens, and the cure is generally effected in from two to four days.

The system for curing. The Lebenswecker must be applied to the nape of the neck and behind the ears, and in very obstinate cases to the back also. It must in this case, as well as in all the following cases, be particularly observed to keep the eye in a state of rest and complete repose and for that purpose a shade ought to be used and the patient should be kept in a warm room.

b. Rheumatic inflammation of the eye. (O. rheumatica.)

Symptoms. Much worse than those above mentioned. Pains, flowing of tears, a prickling sensation, not only in the eye, but also in its vicinity, in the head, in the ears, teeth, etc.; the redness very deep coloured, and not clear and the pupil contracted by a flux of rheum which are the consequences of the disease that has made its attack. Upon the binding skin a curious wreath of small veins, from time to time emitting hot tears, a weakness of sight and a desire to avoid the light and that desire encreases towards late in the evening.

Causes. Rheumatism and some of its results.

Continuance. Slower than the last named disease; still, with the Lebenswecker, we are just as certain of healing this disease and, comparatively, in a short time.

Means to be used. Apply the Lebenswecker down the whole back, on the stomach and behind the ears; should there be no abatement of the complaint after the lapse of three or four days, make one or two applications in the regions of the temples.

c. *Gouty inflammation of the eyes* (O. arthrica.)

Symptoms. Pain sharp, particularly in the eye socket bone; the binding skin of the eye dark red upon which appear serpent formed single veins; around the edge of the hornlike skin a bluish ring; a white matter exudes which does not harden as is usual in other cases. A strong glowing light, such as a powerful flame, will injure the sight;

the pupil is sometimes contracted and then expanded, and at other times takes an oval form.

Causes. Gout and its causes. A cold causes the outbreak of this disease, mostly in elderly people.

Duration. For years previously to the attacks of gout in different parts of the body, pains in the bones which form the socket of the eye and shooting or pricking pains in the eyes precede the breaking out of the gout; by neglect or wrong treatment gray or black catalepsy will follow; whoever uses our Lebenswecker for the gout will seldom have to fear this evil; even after the above symptoms, the current of the disease will be turned on its first appearance and brought forth out of the body in an easy expeditious and favourable manner.

Means of remedy. The Lebenswecker must be used profusely upon the whole back, on the region of the stomach, on the nape of the neck, and behind the ears, and the applications repeated before the punctures are healed, moderate diet must be observed. When the disease is subdued still the operation must be once more performed on the back and region of the stomach and then it will be entirely removed.

d. *Hemorrhoidal inflammation of the eye* (O. hæmorrhoidalis.)

Symptoms. Similar to those before mentioned but milder, the patient feels beating, not pricking pains; often effusion of blood in the interior of the eye. One eye is attacked, and not both at the same time.

Causes. Incipient hemorrhoid fluid and inactivity of the liver together with the eyes having been overstrained.

Continuance. Chronic in periodical attacks. The removal of the sluggishness of the blood's action generally removes the pain, but, even should the pain not return, the hemorrhoids etc. must be removed, which can be effected only by the use of the Lebenswecker, that is, if the instrument be applied with perseverance.

Healing method. Applications on the back, especially in the neighbourhood of the lower extremity of the spine, upon the abdomen, and the calves of the legs as well as two or three indentations on the perinæum. The eye must be washed with tepid water.

e. *Menstrual eye inflammation* (O. Menstrualis.)

Symptoms. Very similar appearances to the last named disease. There are formed here and there little ulcers upon the edge of the corner. Slight swelling of the cornea and eye dropsy.

Causes. This disease appears in females when the monthly evacuations have been stopped or been retarded by some obstruction contrary to the laws of nature.

Continuance. About the same as in the former case.

Method of cure. As in the last named instructions but in very obstinate cases we advise an application to the upper part of the thigh. Apply cold water to the eye; the periodical flux will thus again be restored to its proper and regular course of action. With women who are so far advanced in age that these periodical fluxes altogether cease, the pressure of blood to the eyes would certainly be remedied by the before mentioned means.

f. *Inflammation of the eyes after confinement or child-bearing* (O. puerpuralis.)

Symptoms. Strong redness of the binding skin, and occasionally the chambers of the eyes are filled with a white fluid, chiefly one eye, and this most commonly happens to women during the time of their confinement.

Causes. When the milk is suppressed, or not poperly extracted and a stoppage of the flooding.

Means of healing. Application of the Lebenswecker to the regions of the lower extremity of the spine, the abdomen, and the inner side of one of the thighs, secretions disturbed will by these means be restored to order. In obstinate cases when the slimy fluid continues in the eye make one or two applications of the instrument on the side of the head near the diseased organ.

g. *Inflammation of the eye in the new born infant*
(O. neatorium.)

Symptoms. The binding skin red, the upper eyelid a little swollen, little balls or hard formations on the eyelashes, in the morning a light coloured matter in the eye, endeavouring to avoid the light and the eyes frequently suffused with a thin watery fluid, later the upper eye lid swells more and assumes a red or bluish colour much irritating slimy matter which, when it becomes congealed, closes the eyelids; this slimy fluid forms into matter at last, and is of a yellow or blue colour in a slight degree; the eyelid is very much distended; the horny skin becomes cloudy and covered with little ulcers; often there appears a fluid resembling an admixture of blood and water and when the state of the eye has arrived at this fearful crisis the case may be considered as a forlorn hope.

Causes. This calamity generally arises in a few days after the birth of the tender infant through bad nursing and bad air; too strong a light, or sudden change of temperature easily produces this disease; it is often epidemical.

Continuance The single stages of this complaint may continue longer or shorter, frequently for some weeks, some times only for a few days: the quicker the course the greater the danger; if the highest point of the evil be attained the whole of the case then becomes different and difficult and the nerves exhibit a weakness and want of clearness which can only be subdued and removed by a continuance and long use of the Lebenswecker.

Means of healing. The greatest attention to cleanliness, equality of temperature, and the light of the room properly subdued are the first conditions of an easy and successful cure. In the first stage of the disease it is necessary merely to rub a little oil behind each ear, for the purpose of drawing away the inflammation from the eye; the eye should be washed with tepid water. In the second stage there must be a few light incisions made with the instrument on the nape of the neck, the eye must be washed very often; the slime must not be allowed to collect in a large quantity. In the third stage (which generally speaking ought not very often to occur if our directions are properly attended to) the application of the instrument and oil to the back must be added; ten or twelve incisions. The sloughing behind the ears caused by the rubbing of the oil must be continued and promoted by means of a camel's hair brush so soon as signs of healing appear. Cleanliness in all cases must be particularly observed.

h. *Erysipelas of the eyes* (O. erysipelatosa.)

Symptoms. An eruption of a hot acrid humour accompanied by a yellowish red of the eye lids with a slight swelling, pain and inclining in some degree to avoid the light, considerable tightness and pressure of the eye, a vast overflow of tears, generally over the whole bodily system a lassitude and feverish sensation. It generally affects only one eye; all these symptoms may become worse and then the disease assumes a very dangerous character.

Causes. The evil is a severe rash (very red) and in the eye as well as in other parts of the body it is produced by an abnormal excitement of the epidermis.

Continuance. This complaint will, by careful nursing, very often be cured, but ulcers may break out and fever may set in.

Treatment. Operate with the Lebenswecker and oil on the back and behind the ears, and the perspiration promoted by these means should be kept up, in order to prevent any evil consequence. It should also be borne in mind that cleansing with warm water should be constantly performed.

i. *Inflammation of the eye* (O. herpetica.)

Symptoms. Upon the binding skin yellow or brown spots with single swollen blood vessels; the light cannot with ease be endured.

Causes. This complaint almost always arises in consequence of driving away of erruptions by wrong medical appliances, which throws the retiring inflammatory matter on the eye.

Continuance. According to the age of the patient it will be of longer or shorter duration.

Remedy. Application of the Lebenswecker to the back, behind the ears, upon the abdomen, and upon the place where the eruption was before it was driven into the system. The acidity in the blood will be, at once, removed, or the eruption will again appear in its former place and will disappear a second time but in a very different direction than that which it took through the agency of the physician, but perseverance must be used until the desired effect be produced, but in either result the eye will be relieved completely from the disease with which it was attacked.

k. *Irritating inflammation of the eyes* (O. psorica.)

Symptoms. An irritating irruption on the eyelids which by degrees increases and resembles that kind of unpleasant sensation caused by that filthy and epidemical disease so well known by the name of "the itch."

Causes. Either infection from itch-puss, or having, by wrong means, driven in the irruptions and thrown them on the eye.

Continuance. As before.

Remedy. Frequent applications of the Lebenswecker to the back, the stomach, and behind the ears, carefully to observe cleanliness with the eye as also with the whole body.

l. *Scorbutic inflammation of the eye* (O. Scorbutica.)

Symptoms. Swollen red eyelids. The eye dark with serpent formed little veins, cloudy, the horny skin dirty with slime effusion, and the tears often like pale blood.

Causes. Scorbutic lymph in the veins.

Continuance. As before mentioned.

Method of cure. Repeated applications of the Lebenswecker on the back, nape of the neck, upon the stomach and abdomen and also behind the ears. The eye must be cleansed with cold water.

m. *Scrofulous inflammation of the eye* (O. scrophulosa.)

Symptoms. Deep red enlarged blood vessels over the whole surface of the eye, a strong desire to avoid the light particularly in the morning; swelled veins upon the eyelids; the cornea reddish and cloudy. Persons who are so affected have scrofulous virus in their whole system.

Cause. Scrofulous lymph in their veins.

Time of duration. As before. By long continuance, ulcers obtrude into the cornea.

Healing. As this must be applied to relieve the whole of the scrofulous disease, the patient must apply to a good Baunscheidtist or to us, if he should not succeed in his efforts, under the advice given in this book, to cure himself. In the mean time we advise the patient to apply the Lebenswecker frequently and unsparingly upon the back, abdomen, and behind the ears, and, at all events, he may rest assured, that the disease will be arrested in its progress.

n. *Gonorrhœical inflammation of the eye* (O. gonorrhoica.)

Symptoms. Deep red in the eye and a constant desire in the patient to avoid the light; pain all about the regions of the eyebrows, thick greenish fluid mixed with a thinner fluid exuding from the eye; the binding skin raised and generally puffy around the cornea. The slimy fluid will, as the disease more fully develops itself, become thicker and assume a yellowish colour; the upper eyelid swells and becomes a dark red; at last ulcers, or an abscess, form on the horny skin.

Causes. Either, through infection by gonorrhœa, poison has entered the eye, or it arises from suddenly checking or stopping an existing gonorrhœa.

Period of disease. Quicker or slower according to the circumstances attending the disease. The quicker the more dangerous. If relief do not quickly step in we will venture to predict the loss of the eye.

Remedy. It depends principally upon the power to bring back the ramifications of the disease into the locus in quo that is into the place from whence it came, (the organ of generation.) This result is always obtained if the Lebenswecker be immediately applied to the whole back, the abdomen, and the innerside of the upper part of the thigh and a little of our oil on the acorn formed portion of the penis and with the female the oil must be used at the entrance of the private parts but not to touch the inner portion of the lips of such parts besides it would be advisable to use the instrument two or three times behind the ears. The organs of generation must be kept warm, and the eyes washed with warm water; the patient must remain in repose in a room with a very subdued light. The safest plan to act upon would be, after these operations, to obtain from a Baunscheidtist the proper instructions for continuing the course of treatment for this disease.

o. *Syphilitical eye inflammation* (O. syphilitica.)

Symptoms. General but not a very high coloured redness in the eyeball with a wreath of vessels round the cornea; in the evening pain is experienced, but not in the morning; the cornea is dull and cloudy and subsequently upon it appear little ulcers which sometimes extend to the open edge of the rainbowlike skin; the pupil is deteriorated and the power of sight disturbed.

Causes. General venereal in the body. It is, therefore, easily distinguished from the above.

Continnuance. Similar to the former, but slower in its effects.

Remedy. Applications quite like the last, but also on the back, and in obstinate cases on the regions of the temples, spare diet (in order that the syphilitical poison may be removed out of the body) a careful promotion and keeping up a perspiration. Application in such cases as this ought to be made to a Baunscheidtist.

p. *Opthalmia or Egyptians eye inflammation* (O. ægyptiaca s. bellica.)

Symptoms. Agreeing, at least at first, with the eye inflammation of the newborn infant upon the inner side of the under eyelid the pupillar body standing out the pain increases with exceeding rapidity and the power of sight is almost obliterated. If remedies be not quickly applied it will attain the highest degree of inflammation; the upper eye lid will swell exceedingly and the under one lays itself (puffy) down, and at last the eye is lost: generally both eyes are affected.

Causes. This disease was imported from Egypt by the Army of 1st Emperor Napoleon in 1798 into Europe. The military men are generally seized by this complaint in consequence of living in bad atmospheres, uncleanness by living together in barracks, fatiguing duties, tight neck clothing, heavy head coverings etc. As this disease is very infectious it spreads itself with amazing rapidity and in truth is a fearful epidemic.

Duration. Sometimes quick, sometimes slower, and if it continue long upon the patient it will be very difficult so subdue.

Remedies. Above all things first causes which give rise to this disease ought to be avoided. The Lebenswecker must be applied to the nape of the neck and on the whole of the back, on the pit of the stomach and on the calves of the legs and behind the ears. If, at the expiration of twenty-four hours, no improvement should be apparent some punctures near the temples should be made; the eye should be carefully washed with tepid water, and rags, saturated with cold water, laid on them.

Remark. There are some other kinds of eye diseases but we will confine ourselves to the above as they agree in the principal symptoms of one or other of the statements herebefore made and are the precursors of other diseases such as measles and small pox and will pass away with the complaints which have caused the affection of the eyes, and for such cases I must point to my other book which gives instructions on Baunscheidtismus.

2. THE SLIMY FLUID OF THE EYE.

(Blennorhœa oculi.)

This disease has the greatest similarity to an inflammation of the eye, but it differs from it, as in cases of this sort the disease arises upon the binding skin in the form of little warts which cause the redness of the eye, but with inflammations it is the heat of the morbid part caused by obstruction in the vessels; in cases of the kind which are now under consideration the slime proceeds from the binding skin, but in inflammations it proceeds from the glands of the eyelids.

Symptoms. Binding skin very red, thickened and covered with small warts; great pain; avoiding the light; the power of sight much decreased, accompanied by a continual flux of slime. The matter is at first thin and white, but it afterwards becomes thicker, and at last it forms bad ulcers; the greater or less intensity of the disease depends upon the state of the slime, if it be in a watery state the other symptoms are milder and consequently the disease can be more easily cured; the thicker the fluid the more difficult it is to effect a cure.

Causes. The evil seldom appears through any other causes than those of unskilful treatment or neglect of rheumatic, gouty, or scrofulous cases.

Continuance. If the proper means be promptly used the disease will be easily and quickly removed; if the disease has reached a high degree, it requires great care energy, and judgment to prevent any ill effects remaining on the patient. By neglect, ulcers, seams, blindness, even the destruction of the whole eye may be the consequence.

Remedy. The application of the Lebenswecker on the whole back, nape of the neck, pit of the stomach, and behind the ears together with linen rags saturated with cold water and allowed to remain on the diseased eye so long as the fluid is thin, but if the fluid has become thick, then the Lebenswecker, without oil, must be applied, two or three times, near the temples and underneath the eyes on the cheek bone but not to touch the lower eye lid; this must be repeated daily, the linen rags must not be applied with too warm water, the fluid must be removed from the eye every quarter of an hour with tepid water.

3. EFFUSION OF BLOOD TO THE EYE.

(Hæmorrhagiae.)

Blood effusion may take place *a*) under the binding skin, *b*) in the chambers of the eye, *c*) between the vein skin and the hard skin of the eye, seldom between the vein skin and the net like skin.

Symptoms. *a*) The blood lies between the hard skin and the binding skin, has raised up the latter and is seen through it.

b) The blood can be seen when we look into the eye; if it be mixed with the yellow fluid of the eye it will appear yellow.

c) This is a more difficult point to arrive at correctly, but the causes are generally such that the effusion of blood can be determined; when the sight is partially or wholly injured, black, brown, or red images appear on the field of sight.

Causes. Mechanical; fits etc., also a disturbing of the hemorrhoidal or menstrual flux, strong pressure of blood to the head, tendencing to bleeding, as is often the case in scorbutic or gouty subjects.

Continuance. According to degree, quicker or slower. By great caution it generally takes a favourable turn, the blood lodged is drawn away and the disease is cured. If it be desired to prevent relapses (which are generally worse and more serious in their consequences than the first attack, the extermination of the disease must be a work of great care, diligence, and skill.

Method of cure. Must be according to the particular circumstances of the case. In those cases which are mechanical, application of the instrument must be made behind the ears, and at the nape of the neck. In cases of too much blood flowing to the head, application on the whole of the back and also on the calves of the legs. As it is from gout, scurvy, and hemorrhoidal and menstrual causes that this species or sort of eye disease arises, the remedies for these diseases must be applied; lay a linen rag, dipped in cold water, on the eye at the commencement of the disease. Give the eye and the whole body perfect repose.

4. COLLECTION OF WATER IN THE EYE.

We distinguish 4 kinds: *a*) effusion in and under the binding skin (Chemosis); *b*) dropsy of the anterior chamber of the (Hydropthalmus anticus); *c*) dropsy of the glasslike body (Hydrops corporis vitrei); *d*) dropsy of the whole eyeball (Buphthalmus).

Symptoms. a) Upon the eyeball we see in most cases of this kind that the ring round the horny skin has running ulcers; they are not painful; they are elastic and yellowish, and more or less transparent; the eye lids are generally swollen.

b) The quantity of water in the anterior chamber of the eye presses the horny skin forward and the rainbowlike skin backward, both appear farther from each other, the horny skin shining brighter and is thinner, thereby producing shortsightedness; the fluid thus becoming not so clear, the power of sight is more or less affected.

c) The horny skin is in its normal position, but the rainbowlike skin is pressed forward, the posterior part of the eyeball is encreased and become hard; the look fixed and rigid; the sight is disturbed or quite extinguished.

d) Unite the symptoms from *b* and *c*.

Causes. Independently these diseases come but seldom (a. never). They are either (especially a.) the accompaniments or consequences of neglect or badly treated inflammations, or have their origin in ordinary diseases, such as vicious fluids, liver complaints, disturbed hemorrhoidal and menstrual fluxions, checked diseases (especially skin diseases of the head etc.)

Time of duration. It may easily be conceived that the diseases, from *a*, to *d*, become ever more serious and more important. Is, *a*, only an insignificant evil the other three present the greatest danger if not quickly arrested. By the mechanical pressure of the accumulated water within, the tender optic nerve is liable to destruction, by these means, as well as the liability of the eye ball to burst, and on such events resulting the patient will be for ever deprived of sight; if such a calamity should not happen, other causes of degeneracy may affect the parts near the optic nerve and other dangers may consequently arise.

Remedy. This must be decided according to the state of the disease as, on each occasion, it presents itself; if the case consist of an inflammation, it must be treated in the manner mentioned above, but always very energetically. By hemorrhoidal and menstrual interruptions according to similar cases described under the instructions respecting eye inflammations. Besides applications must be administered behind the ears, near the temples, as well as (except in case, *a*) dry operations under and above the eye. It must be carefully observed that not wet but warm dry cloths must cover the eye; if the stoppage does not soon begin to evince an active movement after the application of the Lebenswecker, take from 2 to 4 drops of our oil in a boiled egg (lightly boiled) and afterwards one or two glasses of cold water; but if the disease has arisen to such an alarming state that the bursting of the eye may be shortly expected (which will very seldom be the case if the Lebenswecker be early applied) nothing more can be performed than to prick the horny skin and allow the water thus to escape. To prevent a relapse it is particularly recommended to continue the general treatment for a short time after convalescence.

5. COLLECTION OF MATTER IN THE EYE.

(Hypopyon.)

Symptoms. The matter formed by the flowing of the inflammatory fluid, arising from irritation of the disease, lodges in the interior of the chambers of the eye, it is not generally visible, only a yellow streak at the bottom of the chamber; the greater the collection of matter the broader is the streak; it is often the case that the whole of the chamber is filled with this matter and then of course the power of sight is destroyed. If the matter be pretty liquid it only fills one portion of the chamber and is subservient to the different motions of the head. The matter itself does not produce pain.

Causes. The globules of matter arise only from very virulent inflammation which has attacked the inner part of the optic nerve of the eye, or the retina.

Continuance. Mostly favourable. The removal of the entire inflammation and the matter is quickly drawn off.

Remedy. For treatment of inflammation (vide ante) some operations near the temples accelerates the absorption of the matter.

6. ULCERS AND ABSCESSES OF THE EYES.

We here give those which accompany or follow the above diseases treated of, as in such cases the treatment of the inflammation is the same.

a. *The sty on the eyelids.* (Hordeolum.)

An inflammatory swelling of the upper edge of the eyelid, and is named from its formation. Often causes great pain accompanied by a running matter and a swelling of the whole eyelid.

Causes. Inflammation of the eyelid, cold, stoppage of digestion or menstrual flux.

Duration. The barleycorn shaped formation goes quickly away by subdividing or mattering.

Remedy. Application behind the ear on the side of the head next to the eye affected, frequently washing the eye with tepid water. If caused by irregularity in the menstrual flux or disordered stomach it must be persevered in otherwise the hordeolum will again make its appearance.

b. ***Pustules on the eyelids*** (Eczema s. Crusta lactea palpebrarum).

Little yellow blisters which appear over the greatest part of the face increase, incrustate, and flow into one another and by neglect a severe inflammation may set in on the eye.

Remedy. Application of the Lebenswecker to the nape of the neck and behind the ears, great cleanliness and frequent washings of the eye with tepid water.

c. ***Blood ulcers*** (Furunculus and Carbunculus.)

They are only distinguished by their extreme virulence. They are formed under the skin, hard, severely defined ulcers, great pain, fever, shuddering, weakness, often fainting.

Causes. Deterioration of the fluids most frequently caused by a debauched dissolute mode of life; infection is the most dangerous when arises from the sting of an insect after it has sucked or fed upon the poisonous carcase of a dead animal.

Duration. If this kind of disease be not promptly and decidedly treated with the right means, an evil may arise causing violent disorder and fever in the system.

Remedy. Strong application of the Lebenswecker to the whole back, the pit of the stomach, on the back, and behind the ears. If the ulcer be in the first stage, cold wet linen must be laid on the sore, should it further develop itself then warm water applications and also warm poultices, that the matter may be the more quickly brought out. The gathering must be opened as soon as it comes to a head, as well as every other great ulcer, abscess, or gathering; the matter as it exudes from time to time must be washed off with tepid water, the warm application of the cataplasm or poultice. The lotions should consist of warm water and vegetable acid, mixed in equal portions; the patient should have a good nourishing diet and good wine. By observing these rules, with regularity and correctness, an unfortunate or unsucessful termination to the operations of the Lebenswecker is seldom the result of its endeavours to assist and relieve the diseases of the eye, in all their various visitations.

d. *Ulcer of the cornea* (Ulcera-corneæ.)

They are either on the surface or deeper, with or without formation of matter. According to the degree of inflammation that has set in on the eye generally, so is the irritation on the binding skin in the degree of intensity, redness, swelling or spasm of the eyelids etc.

Causes. Injury, catarrh, flow of inflammatory matter; they may follow or accompany the measles or smallpox or be caused by a non amalgamation of fluids particularly where the patient is of a scrofulous habit of body.

Duration. According to their degree and causes of suffering, they are very deep, and full of matter, and if neglected or wrongly treated, cicatrisation, cloudiness of vision and injury to the cornea may ensue to the greater or less detriment of the eye sight.

Remedy. Must be according to the causes which bring into existence the disease. The different inflammations must be studied. Operate behind the ears and near the temples, here the application of the instrument invariably produces a beneficial effect; cleansing the eye with warm water, rest, equal temperature, pure air, and a subdued light are generally the most necessary requirements.

e. *Ulcers (more favorable) of the eye.*

Here we must speak of ulcers of the skin, fat, fibre, veins and vessels; they may be found upon the eyelids, the binding skin, cornea (seldom on the latter) and on the tear organ; of the virulent kinds of ulcers (cancers) we may observe that these can be distinguished by their colour, form or greater power of continuance, and it may also be remarked that with cancers there is greater degeneracy of the fluids of the whole body; these differences cannot always be distinguished by the layman; the learned have often, in order to arrive at just conclusions, maturely weighed and considered all the circumstances and proportions of the disease. The ulcers before mentioned can and do often arise from different and various causes. The very many and general as well as local diseases may be the cause of their appearance, but still we are convinced in our own mind that in most cases the evil arises from the use of the knife irritating specifics, such as belladonna etc. are the causes of many diseases of the eye, and that if every disease were treated at the right time according to my method, these distressing cases would be rarities. They certainly may be called forth by every mechanical or chemical injury, and in few cases are those diseases inborn or implanted by nature, but this concerns only the very few.

It must be obvious that a remedy for most diseases must be applied according to the existing circumstances of each case, no specific rule can be laid down. Application must be made to a clever Baunscheidtist or the most minute particulars sent to us and we will according to the best of our knowledge and experience give advice.

f. *Ulcers (virulent cancers) of the eye.*

Symptoms. Cancer in the eye may develop itself in all parts of the eye; in the lids, the binding skin, the tear glands also upon the network. It appears in those places as soft cancers (marrow sponge); if it has its seat upon the outward parts, it is rather easy to know and can be at once distinguished from other diseases.

a. By its deep inroad into the web, consequently it cannot easily be removed with the skin.

b. By the form it assumes, being mulberry-shaped.

c. By its dark red or deep blue colour.

Upon the net skin it is, when it first sets in, much more difficult to discover or determine. It approaches more and more towards causing blindness; if one looks through the pupil a light yellow appearance is seen. Later on in the progress of this disease the lens being forced forward is eaten away and by degrees the whole interior of the eyeball is destroyed.

The pain is pricking at first but very slightly as cancer is caused by the general separation of the fluids, as is also the case in scrofula, we have here a pretty firm point on which to rest the judgment.

Causes. The general cause is, as beforementioned a separation of the fluids. The causes of cancer in most cases are mechanical injuries. It may be .brought on by accident or by those men who are designated "Oculists" but this dreadful scourge seldom arises from natural causes.

Duration. This evil has hitherto always ended with the loss of the eye and in most cases life has been forfeited through it. The often tried system of cutting out the cancer and the taking out of the whole eyeball has been of no avail, for the cancer soon returns and makes its appearance in another part of the body and spreads then the quicker. By the use of the Lebenswecker there is another chance of healing.

Remedy. If the disease has reached a high degree we must also doubt of a real cure and our remedy can only prolong the patient's life. As with the improvement of the fluids the cause of the evil is removed so can this naturally not continually exist and as my plan is acknowledged to work most efficiently for the improvement of the fluids, so it must be allowed that the restoration to health by the patient suffering under this dreadful disease, hitherto deemed incurable, comes within the reach of possibility under my system (see my instruction book.)

The application of the Lebenswecker must therefore be principally applied on the whole of the back, on the nape of the neck, on the whole of the stomach or abdomen and upon the upper part of one of the thighs and behind the ears. There are so many modifications necessary that the course of operations ought to be under the directions of a Baunscheidtist. In all cases a good nourishing food, great attention to cleanliness of the whole body, and the greatest possible command of a pure atmosphere are the real and necessary conditions of a succesful cure.

7. DIMNESS AND CLOUDINESS OF THE REFRACTING MEDIUM OF THE EYE.

Of the thin watery fluid which arises and passes over the surface of the eye in consequence of foreign substances having been introduced into the system through various acting agencies which are continually militating against clear and perfect vision we have already at considerable length descanted on, and therefore we will now proceed to consider the causes of the dimness of the ***cornea, the lens,*** and the ***glasslike body.***

a. *Cornea.*

The dimness of this may consist of many degrees of difference. The most important is the eyeskin *(Pannus)* a dark red crossed by the little veins or completely dim caused by effusions of certain matters. As causes we may mention the following excitement foreign to it; badly treated inflammations, scrofulous habit of body, hemorrhoids, a stoppage of the menstrual flux etc.

The other diseases are partly complete and partly incomplete or spots. To the former belong the faint foggy not quite opaque (obscuratio nubosa) and the whole opaque (obscuratio opaca): the spots may be larger or smaller. In old people there often arises in the under ridge of the cornea a small half moon formed dimness, called the old man's arch (Arcus senilis); as the complete dimnesses, the spots, may likewise have a smoky or foggy appearance, rather transparent, (enubecula) or quite white and opaque (nephelium) or white opaque and raised (pula); furthermore, they are either upon the surface or lay deep in the web of the cornea. Lastly we may make a few observations respecting the marks that remain after sores or injuries; it must, of course, be understood that the effect of these dimnesses, are more or less prejudicial to the power of sight sometimes to such a serious degree that the vision is totally destroyed.

The causes are very numerous. Inflammation, mechanical or chymical injury (operating siezure), infusion of drops especially metallic fluids, and also syphilis, scrofula, rheumatism, gout, suppressed irruption of the skin, interrupted segregations etc.

Only a very few of these diseases are curable according to the old system and experience. If the causes be examined and the effect of the Lebenswecker should be tried and known, it will soon be apparent that it is the best and most expeditious means to an end, for it is almost always an effectual agent. There must be in many cases great perseverance, and only when many medicines have been used is little success to be hoped for.

The remedy must, as a matter of course, be quite in accordance with each cause, and it is therefore entirely impossible to give all the cases, but even if we were to do so it would only serve to confound the layman and lead him into errors. For temporal treatment I must refer them to the foregoing chapters, but advice ought to be asked, as soon as possible, of a Baunscheidtist. The younger the evil the quicker can it be healed.

b. *The crystalline lens.*

The dimness of the crystalline lens is universally known under the name of gray cataract (cataracta.)

According to the seat of the dimness, in which the evil has its origin, the gray cataract is divided, viz. 1. Lens cataract, where the lens itself is obscured, but its capsule healthy, and the corn bark, corn bark cataract, whose difference is known by the name. 2. Capsule cataract, where the lens itself is sound, but the capsule, obscured and cloudy, and even the anterior or posterior capsule wall may be touched with disease. 3. Cataract of the lens capsule where the dimness stretches over the capsule and lens at the same time.

Again, there are a soft and a hard cataract; the former may be called the curdlike cataract, of the consistency of a thick jelly or the fluid (milklike) cataract, in which case the lens is (if we may use the expression) melted; the lens increases in circumference. In the hard cataract the lens is horny, it may even become as hard as bone or stone and then it generally decreases.

The cataract may be a partial or total one, beginning or confirmed, it may be inborn, or become one, accompanied by other diseases. All these circumstances have been mentioned as fundamental principles; but as to going into the subject further, at present, we do not see the necessity. This disease seizes both eyes frequently, but the dimness chiefly arises in a gradual manner; the patient begins by seeing objects through, as we may say, a fine thin veil; this veil is continually becoming thicker; a mist places itself before the eyes, which may appear simply gray or differently coloured. The patient often sees sparks or rays of fire etc. by his imperfect vision which conveys to his brain such an erroneous impression. The dimness continues to increase until it arrives at total blindness, still the patient can generally distinguish the difference between light and darkness; as the lens is the thickest in the middle, the dimness is here the greatest, and the edge more transparent; through the latter therefore more rays of light pass into the eye, and the patient therefore sees the objects sideways more distinctly than those immediately before him, and for this reason he sees in a dark place, or when the eye is shaded, better than in full light, because in the dark the pupil is increased, and then through the more transparent edge of the lens more rays of light strike in, therefore people affected with cataract seek the shade, wear broad brimmed hats, lower the head and half close the eyelids: they suffer little or no pain, but as regards the cataract great difference of symptoms and appearances often take place, and therefore different methods must be resorted to, in order to detect the exact nature and state of the disease, that we may be enabled to apply the proper remedies at the right time and at the right place.

If we look into the diseased eye it will be perceived that the dimness is behind the pupil; the obscurity is at first slight but proportionately damages the sight; the colour of the cloudiness is of a light gray or yellow and seldom red or brown; the form and circumference are different according to the abovementioned kinds. Upon the rainbowlike skin and pupil there is no abnormity to be seen.

Causes. It is very seldom that the gray cataract arises from outward injury or shocks, but a disease of the eye badly treated may give rise to it. This disease is generally founded on a degeneracy of the fluids by which the diseased matter settles on and adheres to that lens which is the least able to withstand it. Rheumatism, gout, scrofula, syphilis, checked skin disease etc. lead to cataract. It is more likely that older persons will be attacked with this disease than women. If it be inborn it appears to us that the fault lies in the vicious state of the fluids.

Duration and Remedy. The gray cataract is always one of the worst diseases of the eye. The physicians say a cure by nature never occurs, therefore they operate upon the eye by making an incision to draw out the lens or press it down. They acknowledge too that in hundreds of cases this powerful attack upon such a tender organ ought not to be made and in as many times it is made in vain; should one patient suffering from cataract once really receive his sight again by the operation, it is only a very trivial recompence in exchange for the pure and healthy light of the eye; for now the equilibrium of the organ of sight is disturbed, one of the mediums of diverging the rays is injured and the sharp convex spectacles are able to give but a very meagre recompence. The physicians were, to a certain extent, right till the Lebenswecker was invented, for a small hope is better than none, and the Materia Medica prossessed no means which were able to strengthen the nourishment, to prompt the absorption and to extract the matter which caused the disease, but when that instrument was brought to bear, the diseased crystalline was roused into new life and again became clear. Our system is capable of accomplishing this, it is succesful upon the lens in the same way that it works upon the inner or outer body, and if the disease has not been too long in existence, and the patient be not too old, and wrong means have not worked too long upon him, we dare present to his view the prospect of the fullest restoration of his eyesight. Respecting our experiences we shall direct attention to, a.

c. *Glasslike body.*

The obscuration of this is frequently the case. The extent to which this takes place varies very much; small spots, fibres, and veins, according to their form and size, constitute the disturbance of the visual organ in different degrees. They can be distinguished from the gray cataracts, as the cloudiness is not discernible directly behind the pupil, light and more tinged with black, still there are many points for our guidance (see black cataract).

These have their foundations in the fusions of blood, and therefore the pressure of blood to the head and eye must be removed, and to accomplish that, the Lebenswecker must be applied to the back, the nape of the neck, and upon the abdomen and calves of the legs. The eye must at the same time have perfect rest as well as the whole body together with a light not too nourishing diet. The eye must be shaded but not bound up with any handkerchief or cloth, nor washed in cold water.

8. THE NERVOUS DISEASE OF THE EYE.

All parts of the eye to which certain nerves lead are liable to such diseases. As the netlike work consists of nerve elements the diseases of the same belong to this category. There are a great number of nervous diseases of the eye which sometimes attack one, sometimes several parts and which may be caused either by weakness or by overstrain upon the nerves. For injury to the moving nerves which apply to the protecting and assisting apparatus of the eye (see Anatomy) may have the consequences following.

1. The inability to raise the upper or lower eyelid.

2. The want of power in the eyeball to move up or down, right or left (squinting.)

These defects may naturally be complicated or combined; upon this depends more or less the share which the nerves of the brain take in the injury; sometimes there is no pain, but such disturbances of the nerves may be felt not only on the eyes but in the teeth, the ears, the head, or the face.

b. Overstrain of the nerves which is set forth under *a*, may be known by the condition of spasm (convulsion.) The spasm may be continuous, that is to say it may consist of the continually drawing together of one or more muscles. The eyelid muscles by which the eye, more or less, closes itself, b. the upper lid which makes the shutting of the eye impossible: *c*, the muscles of the eyes in consequence of which the eyeball must remain fixed towards one direction (spasmodic squinting.)

The spasm may also be a rythmisher that is to say the drawing together and relaxing of the muscles happens alternately. If, *a*, the lid muscle be seized with it, there follows a twitching of the eyelids which may increase to violent blinking, and the other muscles of the face take part in the movement. If the evil, *b*, touch the muscles of the eyes the eyeball rolls about, and seeing minutely is thus disturbed.

c. General weakness of the delicate lids and eye muscle nerves is, in general life, detected by mere observation and this at a single glance, the sight may be quite normal but the eye is soon wearied and tired, and consequently the owner feels a smarting or aching pain when the eye rests long upon one object or the vision is called forth into great activity; all men have experienced this at times. After great exertion of the eye, especially during the night, it suffers a sensation of great weariness, for by a continued strain, tears mostly stream forth, making it see two objects when it ought to see only one, and it is then afflicted with confusion and dimness etc. The healthy eye easily recovers itself out of this dimness or condition, and is again able to bear new fatigues. The diseased eye, after a very short exertion, soon falls into a state of lassitude, and slowly recovers its strength. This weakness may be accompanied with pain in the lid and binding skin, and sometimes withhout pain in these parts.

d. The overexcitement of the nerves, mentioned under the head *c*, is accompanied by pain in the eye which arises suddenly, continues for a longer or shorter period and again disappears, and later again attacks the eye in the same manner, or it reveals itself in a high degree by shunning the light, and the rays of light striking into the eye causes it great pain and spasms.

e. Injury or overexcitement in the nerves which are connected with the rainbowlike skin show themselves in three ways.

1. In the diseased distention of the pupil (Mydriasis). The pupil is very large, often a very small rim of the rainbowlike skin is only perceptible; the shading of the eye, in a healthy state of the organ, makes the pupil more contracted and has little or no influence, the ground of the eye appears pale, because it is more strongly lighted than is natural, the patient is blind in extreme light, and sees tolerably well in half darkness.

2. In the diseased compression of the pupil (myosis) it forms the reverse of the above; the introduction of strong light has for its consequence a trivial enlargement of the pupil, or perhaps none at all.

3. The spasmodic extension or contraction of the rainbowlike skin (Hippus.) The pupil distends and contracts itself in this disease in quick succession; if it is in a small degree it is of little consequence, and the inconvenience suffered is of a trifling character, but should the spasms become worse a disturbance of the sight and other evils, especially nervous, may be caused.

The nervous disease may arise from innumerable causes; it is therefore impossible to mention them all here; of those diseases of the body which demand a natural nourishment of the nerves I shall here only mention rheumatism, gout, green sickness and interrupted monthly periods, suppressed diseases of the skin and perspiration, hypochondrical attacks and hysteria; again it may be stated that all influences which operate against the abnormal state of the human system and all undue excitement of the nerves of the eyes; pressure upon them caused by ulcers etc. fright, continued lowness of spirits, inflammation, diseases of the teeth, worm excitements, exciting medicines and poisons (belladonna) etc. Lastly all continuous and important exertions of the eye; reading or fixing fine workmanship by too strong a light or by insufficient light, looking too long through a microscope or telescope etc.

It may easily be understood that the remedy rests more with the passing away of the root of the evil, and therefore the attention must be more energetically directed to this than to the name of the disease: it will be evident to every one that it is an impossibility to set down all cases: it must be always carefully ascertained whether the disease is caused by pressure of blood to the head, or an insufficiency of blood, in order that the patient may be enabled to chalk out the mode of treatment which ought to be followed. In case of too little blood being in the system the Lebenswecker should be applied to the back, and calves of the legs, and in case of too much blood the instrument must be applied behind the ears. In this manner the patient may prepare for his course of treatment until he (not wishing or feeling sufficient confidence to treat the case himself) has received from me, or a good Baunscheidist, instructions. In most cases a cure may be depended upon.

f. *The black cataract.* (Amaurosis.)

Partial or complete loss of sight in consequence of a disease of the netlike skin or of the visual nerve; the partial blindness (Amblyopia) is generally the commencement of total blindness.

The term black cataract is, properly speaking, only a name for those various kinds of visual nerve diseases and which differs merely in one sense from that which deprives the patient of one of his noblest organs. The evil is as frequent as its causes are numerous, and as my experience (in contradiction to the medical faculty) has obtained for me a great victory, I will endeavour to explain my ideas a little more fully and comprehensibly.

To ascertain the disease is not an easy task, as it takes its seat in the nerves and lies deep in the interior of the eye which in other parts may be quite normal. Distortion, fixedness or abnormal increase of the pupil which last is very frequently not perceptible, but these may arise from other causes; the pupil appears duller and more cloudy than when it is in a healthy state: often behind it a gray background is perceptible, but which lies so deep in the interior of the eye that it may, by the inexperienced, be mistaken for gray cataract. We can mostly determine the tendency to the evil by observing the patient when he looks at any object, for then he squints. The experienced do not depend upon this circumstance only as it is not at all times a certain test. If one looks into a diseased eye and sees how the wonted life spirit is departed from it, we may compare the eye in this case to a dead camera obscura, and if we take a view of the general condition of the body we will naturally reflect upon the interchange of the outward world with the mind which ceased to hold communion with things visible to the sense of sight, and the medium through which all this vast calamity visits the patient may be attributed to the disorganized state of the nerves. The latter, we may say, are dead, and so the black cataract comes into existence.

The black cataract may appear by very different ways often many months and even years pass from the commencement of the disease to total blindness, which often attacks the patient suddenly. The following are the principal classes of this distressing disease; it must be observed that the differences only exist whilst the complaint is developing and maturing itself, for in the eventual result, in which opinion nearly all persons concur, no more differences exist, that is, there can be but one opinion when blindness has set in.

1. The patient sees the daylight gradually day by day more feebly, at last not at all, but after the sun has set recovers his sight again. In such case the daylight blindness has struck him (Nyctalopia) and even in a dark room, during the day, he sees nothing. The eye is very sensitive; rays of light excite tears or spasms and cause pain: it may be laid down as a general rule that sharp unhealthy fluids in the body rule as causes.

2. The patient begins, in the first stage of the disease, by seeing objects indistinctly, as if through a mist. The light is not strong enough for him even by day, and from morning to evening his sight is very much obscured. This condition is called night blindness (Hemeralopia) and arises from weakness.

3. The patient suffers severe head-ache, particularly near the eyebrows, with the strength of which pain the power of sight stands in inverted connection, or in other words the sight becomes stronger or weaker according as the pain in the head becomes more or less severe. Fatigue, sleepiness, injury to individual muscles, giddiness. Now begins the seeing of midges, as it is so expressed (mouches volants). Little spots and little figures swim before the sight and disappear; if the patient wishes to fix his sight upon them, the figures unite and change their form; there are appearances such as undulating floating fibres or threads, caterpillars, serpents and snakes, then images uniting themselves, which, by degrees, assume an assemblance to a black

net or a green meadow, and make the outer world appear to the diseased eye as if everything in it were surrounded by a mist. This thickens till it reaches black night. Sometimes the figures appear in different colours and sometimes bright and fiery. This disease may spring out of various causes.

4. When the evil has first seized the retina netlike skin the patient sees only half the object with the sick eye. This may be designated half sight (Hemiopia). The causes rest on exciting conditions.

5. The disease appears periodically, regularly, or irregularly. After days, weeks, or months, during which time the patient's sight has been quite clear, often is he suddenly struck with blindness at certain times. This obscurity of sight disappears and occasionally returns. The causes are generally diseases of the stomach and abdomen, intermittent fever, irregularity of the mensual flux.

6. Many females, during pregnancy, become stone blind, and such is often the case with many every time they are pregnant. This state of blindness remains longer or shorter and very frequently it continues until deliverance.

The cause of this visitation may be attributed to idiosyncracy: if the disease should appear gradually towards the end of the time of pregnancy it is doubtless caused by a determination of blood to the head.

7. The black cataract may be implanted by nature and then it rests on such malconstruction that it would be perfectly absurd and might create a false hope if we asserted that there was a remedy in such a case. This dreadful complaint is very often implanted from the very state of embryo, begins to develop itself at a certain age, and its cure is seldom effected. Having now cast a look upon the most general causes of disease in the eye, which spreads out into such numerous branches, we shall simply make this assertion, that most of them can be cured by the application of the Lebenswecker, but in eye diseases, more parti-

cularly than in any other diseases of the human frame, the age of the patient to be operated upon must be most studiously taken into our calculation on commencing to effect a cure, the time during which the evil has existed, and the treatment to which it has theretofore been subjected, all these points must be seriouly considered before we commence our course of operations under our new system; experience must again work, as can easily be understood, and we can only give some useful hints respecting the temporary treatment, they are nevertheless very important as so very much depends upon the early treatment. To the first order of causes belongs the mechanical injury to the visual nerve, or the netlike skin, and the disturbing influences on the visual nerve whereby its conducting power is injured. Here we may expect to find ulcers and foreign substances or deposits which we know, from our long experience, is most frequently the case, arising from the degeneration of the fluids (scrofulous, gouty, or syphilitical) but when the nerves have not yet been seriously injured. Tearing or damaging the nerves by wounds or great shocks etc. where each trial to heal has proved abortive, sudden and continued blindness: the preliminary measure ought to be to operate with the Lebenswecker behind the ears and upon the whole area of the back.

The second class of influences are found in watery, bloody, or purulent runnings or effusions. These are generally caused by perspiration, the time when the milk is rising into the breasts of females or in their monthly evacuations being checked or interrupted; if no organic injury has been caused thereby, then after the removal of the cause, absorption of the fluid takes place, and the cure is effected; the points of operation are on the abdomen, stomach and back; a super abundant tendency to blood in the system is frequently an accompaniment or appendage to the disease and we shall therefore classify it as the 3rd. This is caused by the different interruptions to the circulation of the blood by the stoppage of the usual hemorrhage or flux of, blood incidental to women at the time of parturition, or a little afterwards, great and continued shocks of the mind, or too frequent indulgence in high seasoned and too exciting foods, frequent doses of medicine, particularly such poisonous ingredients as Belladonna, thornapple, opium, ergot of rye, etc. leeches, cuppings, blisters to the heads of persons who are liable to congestion of the brain.

The energetic removal of the disease must be accomplished by a vigorous application of the Lebenswecker upon the back especially upon the lower half of the same, and upon the calves of the legs; this is the first measure to be adopted to secure a favourable result to the operations of the instrument.

A fourth class of causes is formed by the degenerate state of the blood, as it happens in many diseases of the liver and kidneys; imprudent healing of foot sores of long standing, ignorant treatment by driving in diseases of the epidermis, such as scab on the head, itch, tetters or ringworm, purples, small, pox measles etc., or the plica polonica, scrofula, syphilis, long use of poisonous so called' remedies such as mercury, china root, fox-glove etc.

In these last named cases of disease it is of vital importance to remove them through the epidermis, by drawing off the diseased matter, which chiefly lies immediately under the epidermis, and also as an assisting agent to excite the digestive organs into proper action, in order that they may be able to perform their functions with more vigour, regularity, and activity, and thus be the agents of creating fresh, healthy, and pure blood into the arteries, therefore the Lebenswecker ought to be applied, generally, over the surface of the back, upon the abdomen, and on the calves of the legs.

To the fifth class belongs a want or scarcity of blood which causes a dearth of nourishment to the nerves; this is caused by drawing away the blood, hemorrhage, vomiting blood, long existing diarrhœa, bad food, leading a debauched life etc.

The causes must, of course, be removed as soon as possible, but the blood must be directed to the head, the preliminary operation must be made on the whole back, especially on the upper half, on the nape of the neck, and behind the ears.

Lastly we add a sixth class, which embraces different excitements of the nerves, which by ramification comprehends the visual nerves. In these are to be included spinal affections, epilepsy, spasms, great and wearying pains in different parts of the body, worm and stone affections etc.

Not all but many of the diseases of this character are to be removed. Applications of the instrument on the vertebre, in cases of worms, it should likewise be applied on the abdomen and round the navel in the latter cases.

9. DISEASES OF THE EYES WHICH REQUIRE SURGICAL OPERATIONS OR ARE QUITE INCURABLE.

In this chapter we shall choose principally the diseases against which the Lebenswecker cannot be used. Many may think that we might have had a desire to avoid this part of the subject, but they are mistaken. Our exertions tend to set boundaries to our invention and system, and to point to those men who have adopted it, where and when they may have success and when not. It has never entered into our mind to attempt to deteriorate the merit of the surgeon, or to assert that operations must never be performed on the eye. We only endeavour to point out the folly and danger of improper and superfluous use of the surgical science. We will speak decidedly, yet truthfully, and as we have always done so, and intend to continue to do so, we doubt not that the surgeons (who are simply and purely acting as surgeons), in general, will pay all due homage to us. Attacks with lancets and other instruments on so delicate an organ as the eye is rough work, very doubtful and very dangerous, and these measures ought to be resorted to only in the case of a forlorn hope when the light of the eye would otherwise be lost with a certainty. There are in most cases only consequent conditions from neglect or wrong treated of in the foregoing chapters, and if our advice and means that we propound be adopted at the right time, the true ultima ratio, which the surgeon offers, would only seldom be called into requisition.

Even in such operations the Lebenswecker offers an excellent means of assistance as the best antiplogisticum which renders all the injurious bloodletting unnecessary. There is scarcely one wound when under treatment towards a cure where the antiphlogose method does not come into use. The surgeons may rest assured that our means in relation to the last named system offers the best known method for a successful termination.

We shall now enumerate the single diseases belonging to this portion of our subject.

a. Want of eyelids (one or both) (Ablepharon,) inborn or the consequence of injury or wasting sores.

b. Want of eyelashes and eyebrows (Madarosis) is generally owing to syphilitical and other breakings out, inflammations, small pox etc.

c. Want of rainbowlike skin (Irideremi), inborn or from the effects of injury.

d. Want of pupil (Atresia pupillae) inborn, comes in most cases by neglected inflammation.

e. Splits in the eyelids (Coloboma palpebrae).

f. Perforation in the horny skin Cornea (Perforatio corneae) mostly effected by a destructive ulcer.

g. Division in the rainbowlike skin (Coloboma) iridis inborn.

h. The edges of the eyelids (Ankyloblepharon) inborn or resulting from debauchery, irritation and operations.

i. Growing together of the eyelids and fastening to the eyeball (Symblepharon) the same causes as, *h.*

k. The rainbowlike skin growing to the front or back substance (Synechia) in consequence of inflammation and debauchery.

l. Hare-eye (Lagopthalmus) shortened eyelids after sloughing, eating away of the bones or mortification.

m. Eyelids turned inwards (Entropium) inborn or by inflammation, injury, irritation, spasms etc.

n. Eyelids turned outwards (Ectropium) witcheyed chiefly arising from great inflammation or from a scrofulous habit of body. Those who were afflicted with this disease in the middle ages were looked upon as witches, the reason for this supposition, we think must have been the following. The healing art then was chiefly confined to the abbeys and cloisters. A great number of these diseases were considered supernatural, and the monks endeavoured to cure by promises and oaths but as their superstitious art was unable. to effect a cure and the evil remained visible, and fearing that the people might lose confidence in their healing powers, they declared the unfortunate individuals so afflicted were connected with the devil, and they put them to death by fire, certainly a very speedy and effectual method to support and establish their authority.

o. The breaking of the cornea (Keratocele). The cornea is made thinner and by the pressure of the inward fluid as forced forward like a bladder and this is the consequence of sores.

p. Prolapsus of the lens (Dislocatio lentis) by which the lens enters into the forechamber mostly through a blow or great violence to the head or eye.

q. Prolapsus of the rainbowlike skin comes through an opening in the cornea, which disease may arise from mechanical injury, such as cataract operation, or from an ulcer.

r. Prolapsus of the eyeball (opthalmoptosis), by which, in consequence of shocks or powerful injury to the eyeball, it partially or entirely protrudes from the socket.

s. Softening of the cornea (Malarea corneae) This arises from injury to the nerves and inflammation as the nourishment to this portion of the eye is by this disease, in a great measure, taken away, the cure is scarcely to be expected.

t. Softening of the hard skin (Slerectasia), see *s.*

u. Softening of the glasslike body (synchisis corporis vitrei) always in consequence of other diseases which prevent the nourishment of the body. Energetic applications of the Lebenswecker, at the commencement of the disease, may strike at the root of the complaint and eradicate it.

v. Injuries or wounds (Laesiones) mechanical or chymical; wounds by cuts, pricks, incisions, or by the introduction into the skin and flesh of foreign substances, irritating disturbances etc. these different causes may affect (and also burns) the binding skin hard horn skin, rainbowlike and vein skins, the lens,- or even the whole eyeball.

w. Squinting (Strabismus) is an inborn defect owing to a defective state of the muscles and their nerves, habit of body, and spasmodic condition, which last curable case was mentioned in a former chapter.

x. Shortsightedness (Myopia) mentioned in paragraph 4.

y. Longsightedness (Presbyopia) caused by too small an intercepting or power of accommodation to the eye medium.

z. Fistulas of the tear bag (Fistulae sacci lahrymalis). This complaint consists of an unnatural opening of the tearbag into one of the sockets or towards the cheeks. If the evil has arisen in consequence of some common disease such as syphilis, scrofula etc., the attempts to cure it will, in most cases, remove the fistula, but illness is generally the consequence of erroneously treated inflammation, such as partially destroying the bones etc. or it ensucs from the tendeney to ulcers in the tear channel.

It is to be seen that we have defined a great number of diseases, but we pass over some of less frequent occurrence, whose healing by the Lebenswecker we do not pretend to undertake. It is also evident that most of these are not real diseases but arise from wrong treatment, contary to the dictates of nature, and which might have been so easily cured, in the first instance, by my simple invention. The number of these destructive diseases would be reduced to very small dimensions if Doctors and Laymen would only act upon the simple laws of reason and truth and adopt our healing method, which the results, hitherto effected, must satisfy every reflecting mind it so well deserves. Throughout a vast territory there are countless multitudes who give our system a first place in their consideration and esteem and they truly may be said to reap the harvest, and may that harvest be bountiful to greater numbers of our suffering brethren, and may those physical pursuits which encumber the memory, without calling forth the good attributes of our nature, be deservedly reprobated, and may the time soon arrive, when learning shall only be valued as it becomes subservient to piety, justice, faithfulness, and naked truth, and consequently to the benefit, health, and happiness of all the human race.

APPENDIX.

General directions for the use of the Lebenswecker copied from our instruction book for the use of those who do not possess it.

1. As the principal seat of each dangerous disease is in the back, it follows that it should be first operated upon in order to free life from the diseased pressure, and especially upon the vertebre, as well as on the right and left of the same.

2. The instrument must be here applied from 40 to 60 times, according to the amount of disease or capability of endurance of the body.

3. After having finished the operations of the instrument and laid on the oil to be absorbed by the epidermis in order that the interior of the dress may not receive any portion of it, the patient may resume his habiliment and await the success of the operation.

4. The healing process may be quickened by rubbing the little pimples (which will make their appearance in a short time after the application) on the third or fourth day with a brush, thus opening them and allaying the itching, this brushing however is not necessary towards the cure, but is suggested merely for the comfort of the patient.

5. Should, some days after the operation, any remains of the pain still continue in any portion of the body, let the healing of the irruption be waited for, which will be about 10 days, then another application must be made, but this time a little stronger, then, in light diseases, both the pain and the complaint will pass away.

6. In stubborn diseases the applications must be continued at periods of ten days distance until the wished for result arrives. In the worst cases the course will not last longer than from four to six months.

7. In the first three days after the application the patient must be most careful to avoid all thorough drafts of air and wet, which, considering the high state of heat in which the body is after the operation, would prove most injurious to the healing procedure. The morning ablution must not be performed until an hour after rising, and all work requiring the use of water must be avoided (such as washing vegetables) and all damp and cold places such as cellars etc.

8. The general way of living, as far as food and drink are concerned, need not be changed, as that would cause a change in the system, which would not have the desired effect. Eating acid substances or drinking acid fluids is entirely forbidden.

9. For the comfort and satisfaction of the timid and cautious, it may be in place here to remark that the Lebenswecker is accompanied by no danger even to the infant and can never prove injurious to any one.

10. The repetition of the operations of the Lebenswecker at intervals of ten days is not to be wondered at: the working of the oil in keeping the little punctures open lasts about ten days according to our observation and experience.

HANDLING OF THE INSTRUMENT.

The management of the instrument is very simple and the slight or deeper insertion of the needles is completely according to the direction and under the immediate power and control of the operator; after the cover is unscrewed, the handle, to which is attached the spiral spring, must be drawn towards the body a little, so as to prevent the needles touching the skin of the patient before the actual operation commences, the handle must be held fast and then drawn towards the body of the operator about one inch, when the application is to a bony portion of the body, and about one inch and a half to two inches to a fleshy part, and then quickly let loose, in short explanation the spring must be drawn out on bony places one inch and on fleshy places one inch and a half to two inches. After the needles have done their work, the instrument can be used on other places and in the same manner as before.

The needle punctures will, of course, be the deeper the further the spring is drawn out; it must, however never be drawn out more than two inches and a half, as then the spiral spring would be strained and become useless. The right measure or degree of strength to be used in drawing out the spring can be easily judged by each operator if he will only he careful at his probation.

To the Baunscheidtist Doctors We think the following hints may be useful. As the instruments in their possession will be used on many patients, in order to avoid the possibility of one disease being blended with another. After having used the instrument, the needles should be smeared with oil by means of a feather and then with a dry feather brush off the oil, but the safest and most effectual way is to jerk the needles into a piece of fat bacon two or three times and then rub them with a dry feather. But in order fully to satisfy the demands of science, chlorid of lime, and a little sulphuric acid poured over, which will generate Calcaria subchlorosa acid, this will instantly remove from the needles all infectious substances, and the cost and troubles are very trivial.

REMARKS FOR THOSE WHO WILL ESPECIALLY FOLLOW MY ADVICE.

Those who wish to have my advice may, when they send me orders, state the age, cause, continuance of the disease, the manner of life of the patient, especially the medicines hitherto used by the patient, and we shall, at all times, be ready and willing to give them our special advice.

PRICE OF THE LEBENSWECKER.

From Charles Baunscheidt, the Inventor, Mechanic in the Village of Endenich, near the City of Bonn in the kingdom of Prussia; the instrument is stamped with the name of the inventor in two places. Four Thalers each, but a purchaser (wholesale) will have a discount allowed.

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